Name _____

Review 2

Adding and Subtracting Decimals

Find 1.7 + 2.45.

Line up the decimal points.

$$\begin{array}{r} 1.7 \\ +\ 2.45 \\ \hline \end{array} \qquad \begin{array}{r} {\scriptstyle 1} \\ 1.70 \\ +\ 2.45 \\ \hline 4.15 \end{array}$$

← *Write zeros to show place value.*

↑ *Place decimal point in answer.*

Find 36.57 − 4.6.

Line up the decimal points.

$$\begin{array}{r} 36.57 \\ -\ 4.6 \\ \hline \end{array} \qquad \begin{array}{r} {\scriptstyle 5\ 15} \\ 3\not{6}.\not{5}7 \\ -\ 4.60 \\ \hline 31.97 \end{array}$$

← *Write zeros to show place value.*

↑ *Place decimal point in answer.*

Find each sum or difference.

1. $\begin{array}{r} 2.65 \\ +\ 13.30 \\ \hline \end{array}$

2. $\begin{array}{r} 14.10 \\ -\ 3.05 \\ \hline \end{array}$

3. $\begin{array}{r} 744 \\ +\ 36.2 \\ \hline \end{array}$

4. $\begin{array}{r} 9 \\ -\ 0.6 \\ \hline \end{array}$

5. $\begin{array}{r} 8.97 \\ +\ 66 \\ \hline \end{array}$

6. $\begin{array}{r} 100 \\ -\ 0.22 \\ \hline \end{array}$

7. $\begin{array}{r} 6.8 \\ +\ 237.29 \\ \hline \end{array}$

8. $\begin{array}{r} 0.5 \\ -\ 0.23 \\ \hline \end{array}$

9. 15.4 − 8 = _____

10. 3 − 2.54 = _____

11. 1.34 + 4.1 = _____

12. 133.01 − 5.6 = _____

13. 448 + 1.75 + 80.3 = _____

14. 12.3 + 0.61 + 100 = _____

15. On the 3-days of their vacation, the Davis family traveled 417 mi, 45.3 mi, and 366.9 mi. How far did they travel all together?

_____

16. Etta bought a calculator for $15. Glenn found the same model for $9.79. How much more did Etta pay than Glenn did?

_____

Name _____

Review 4

Multiplying with Decimals

Find 4.3 × 2.7.

Multiply as you would with whole numbers.	*Count the number of decimal places in both factors. The total is the number of decimal places in the product.*
2 4.3 × 2.7 301 860 1161	4.3 ← 1 decimal place × 2.7 ← + 1 decimal place 11.61 ← 2 decimal places

Find each product.

1. 14 × 8.8 = 112 + 1120

2. 1.6 × 9

3. 0.4 × 3.2

4. 0.05 × 0.3

5. 2.15 × 8.3

6. 3.3 × 0.12

7. 0.51 × 4.2

8. 1.35 × 13

9. 23 × 0.47 = _____

10. 0.9 × 5 = _____

11. 168 × 2.25 = _____

12. 0.8 × 0.11 = _____

13. 20 × 20.2 = _____

14. 4.9 × 0.3 = _____

15. A roll of paper towels contained 250 sheets. Each sheet was 8.75 inches long. How long was the roll? _____

16. Tania bought 3 new sweaters. Each sold for $19.99. How much did she spend? _____

Name _____

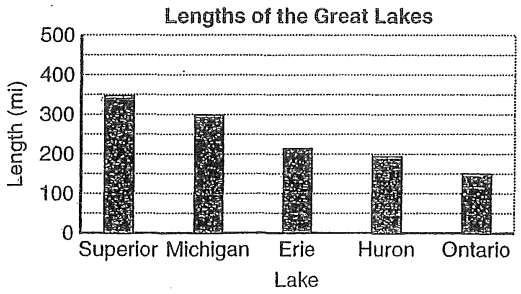
Review 8

Interpreting Data

The **bar graph** shows the lengths in miles of the Great Lakes. Lengths of bars represent lengths of lakes.

Which is the shortest Great Lake?

The shortest lake is Lake Ontario.



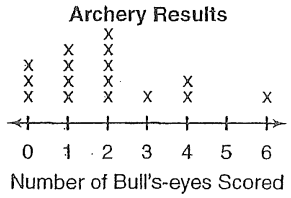
Use the graphs to answer each question.

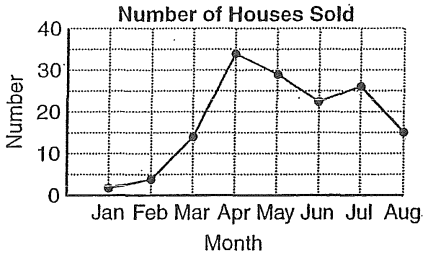
1. How many archers scored 4 bull's eyes?

_____

2. What was the most common number of bull's-eyes scored?

_____





3. In which month were the most houses sold?

_____

4. In which month were about the same number sold as were sold in August?

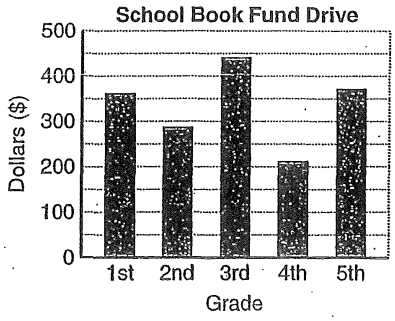
_____

5. Which grades raised about the same amount for the school book drive?

_____

6. The school's goal was to raise $1,500. About how much did they raise in all?

_____



Name _____

Review 10

Adding and Subtracting Fractions

Find $\frac{2}{3} + \frac{1}{6}$.

3	(6)	9	12	15	Multiples of 3
(6)	12	18	24	30	Multiples of 6

The least common denominator is 6.

Write equivalent fractions. $\frac{2}{3} = \frac{4}{6}$

Add. $+ \frac{1}{6} = \frac{1}{6}$

$\frac{5}{6}$

Find $\frac{1}{4} - \frac{1}{5}$.

4	8	12	16	(20)	Multiples of 4
5	10	15	(20)	25	Multiples of 5

The least common denominator is 20.

Write equivalent fractions. $\frac{1}{4} = \frac{5}{20}$

Subtract. $- \frac{1}{5} = \frac{4}{20}$

$\frac{1}{20}$

Find each sum or difference.

1. $\frac{1}{4} + \frac{2}{3} =$ _____

4			
3			

2. $\frac{11}{12} - \frac{5}{6} =$ _____

12			
6			

3. $\frac{1}{3} + \frac{4}{9} =$ _____

4. $\frac{3}{7} + \frac{2}{7} =$ _____

5. $\frac{11}{12} - \frac{5}{12} =$ _____

6. $\frac{1}{2} + \frac{1}{3} =$ _____

7. $\frac{1}{3} - \frac{1}{5} =$ _____

8. $\frac{3}{8} - \frac{1}{6} =$ _____

9. $\frac{3}{5} + \frac{3}{10} =$ _____

10. $\frac{1}{2} + \frac{2}{5} =$ _____

11. $\frac{2}{3} - \frac{1}{4} =$ _____

12. Meg practiced the piano for $\frac{5}{12}$ hr. She did homework for $\frac{3}{4}$ hr. How much longer did she do homework than she practiced the piano?

_____

7

Name _____

Adding Mixed Numbers

R 4-5

To add mixed numbers, you can add the fractional parts to the whole number parts, and then simplify.

Find $2\frac{2}{4} + 3\frac{1}{4}$.

The fractions have a common denominator. Add the fractions. Then add the whole numbers.

$$\begin{array}{r} 2\frac{2}{4} \\ +3\frac{1}{4} \\ \hline 5\frac{3}{4} \end{array}$$

Find $3\frac{2}{3} + 4\frac{1}{9}$.

Write equivalent fractions with the LCD.

$$\begin{array}{rcl} 3\frac{2}{3} & = & 3\frac{6}{9} \\ +4\frac{1}{9} & = & 4\frac{1}{9} \end{array}$$

Add the whole numbers.
Add the fractions.
Simplify if possible.

$$\begin{array}{r} 3\frac{6}{9} \\ +4\frac{1}{9} \\ \hline 7\frac{7}{9} \end{array}$$

Find $4 + 3\frac{3}{5}$.

Add the whole numbers; then add the fraction.

$$\begin{array}{r} 4 \\ +3\frac{3}{5} \\ \hline 7\frac{3}{5} \end{array}$$

Find each sum. Simplify your answer.

1. $2\frac{1}{5} + 2\frac{3}{5} =$ _____

2. $4\frac{2}{3} + 1\frac{1}{6} =$ _____

3. $5\frac{3}{5} + \frac{3}{10} =$ _____

4. $8\frac{5}{8} + 1\frac{5}{12} =$ _____

5. $6\frac{1}{4} + 11\frac{3}{8} =$ _____

6. $7 + 8\frac{1}{3} =$ _____

7. In 2001, the men's indoor pole vault record was $20\frac{1}{6}$ ft. The women's record for the indoor pole vault was $15\frac{5}{12}$ ft. What is the combined height of the two records? _____

8. **Writing in Math** How high is a stack of library books if one book is $1\frac{3}{8}$ in. high, the second book is $1\frac{5}{6}$ in. high, and the third is $2\frac{1}{3}$ in. high? Explain how you solved this problem.

_____

_____

_____

Name _____

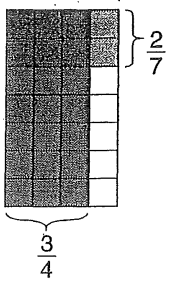
Multiplying Fractions

R 5-2

Find $\frac{3}{4} \times \frac{2}{7}$.

One Way

Draw a picture. Simplify if possible.



6 of the 28 squares have overlapping shading.

So, $\frac{3}{4} \times \frac{2}{7} = \frac{6}{28}$.

Simplify $\frac{6}{28}$ to $\frac{3}{14}$.

Another Way

Multiply the numerators and denominators. Simplify if possible.

$$\frac{3}{4} \times \frac{2}{7}$$
$$= \frac{3 \times 2}{4 \times 7} = \frac{6}{28}$$
$$= \frac{3}{14}$$

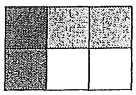
Simplify First

Find the GCF of any numerator and any denominator.

The GCF of 2 and 4 is 2. Divide 2 and 4 by the GCF.

$$\frac{3}{\cancel{4}^{2}} \times \frac{\overset{1}{\cancel{2}}}{7} = \frac{3}{14}$$

Write an equation for each picture.

1. 

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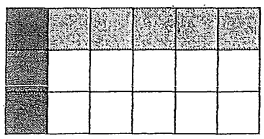
2. 

_____

Find each product. Simplify if possible.

3. $\frac{6}{8} \times \frac{1}{3} =$ _____

4. $\frac{5}{6} \times \frac{7}{10} =$ _____

5. $\frac{4}{5} \times \frac{3}{8} =$ _____

6. $\frac{1}{2} \times \frac{4}{9} =$ _____

7. **Number Sense** Can you simplify before multiplying $14 \times \frac{25}{27}$? Explain.

_____

_____

Name _____

Review
14

Problem Solving: Strategies

A computer store has 25 printers and computers. There are 7 more printers than computers. How many of each are there?

	Printers	Computers	Check
Guess 1	20	5	20 − 5 = 1
Guess 2	14	11	14 − 11 = 3
Guess 3	16	9	16 − 9 = 7√

Solution: There are 16 printers and 9 computers.

Problem Solving Strategies

- Act It Out
- Draw a Picture
- Look For a Pattern
- **Try, Check, and Revise**
- Make an Organized List
- Make a Table
- Solve a Simpler Problem
- Work Backward

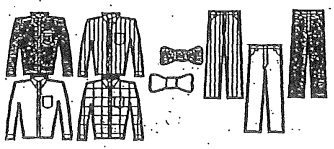
Use any strategy to solve.

1. At the veterinarian's office, Terri learned that her dog weighed 4 times as much as her cat. Together the pets weighed 40 lbs. How much did the dog weigh? _____

2. Yasmin arrived home from play practice at 4:25 P.M. The walk home took 15 minutes. Practice began 20 minutes after the final bell and lasted for a half hour. When did school end? _____

3. Vanessa, Diego, Rose and Randy stood in line for lunch. Rose was just behind Vanessa. Diego was not next to Rose or Randy. Write the line order. _____

4. Students played dodge ball and volleyball for 45 minutes. They played dodge ball for 11 more minutes than they played volleyball. How long did they play dodge ball? _____

5. Mr. Jones has 4 shirts, 2 ties, and 3 pair of pants. How many days in a row can he wear a different outfit?  _____

12

Name _____

Customary Measurement

R 10-1

Units of Length

foot (ft)	1 ft = 12 in.
yard (yd)	1 yd = 3 ft
	1 yd = 36 in.
mile (mi)	1 mi = 5,280 ft
	1 mi = 1,760 yd

Units of Capacity

cup (c)	1 c = 8 fluid ounces (oz)
pint (pt)	1 pt = 2 c
quart (qt)	1 qt = 2 pt
gallon (gal)	1 gal = 4 qt

How to change from one unit of measurement to another:

To change from larger units to smaller units in the customary system, you have to multiply.

120 yd = _____ ft

1 yd = 3 ft

120 × 3 ft = 360 ft

120 yd = 360 ft

To change from smaller units to larger ones, you have to divide.

256 oz = _____ c

1 c = 8 oz

256 ÷ 8 = 32

256 oz = 32 c

Complete.

1. 36 in. = _____ ft
2. 4 qt = _____ c
3. 5 lb = _____ oz
4. 39 ft = _____ yd
5. 1.5 mi = _____ ft
6. 3.5 gal = _____ qt
7. 2 T = _____ lb
8. 16 pt = _____ qt
9. 64 oz = _____ lb
10. 3 yd = _____ in.
11. 4 gal = _____ pt
12. 55 yd = _____ ft
13. 6.5 lb = _____ oz
14. 20 pt = _____ gal
15. 4.5 qt = _____ c
16. 205 yd = _____ ft

17. **Reasoning** A vendor at a festival sells soup for $1.25 per cup or $3.75 per quart. Which is the better buy?

_____

Name _____

Review 16

Perimeter

Perimeter is the distance around a shape.

You can add the lengths of all the sides or you can multiply the sum of the length and the width by 2 to find the perimeter of a rectangle.	If only one side of a figure is given, then all sides have the same length.
25 in. 9 in. ☐ p = 25 in. + 9 in. + 25 in. + 9 in. = 68 in. **or** $p = 2 \times$ (25 in. + 9 in.) = 68 in.	5 cm ☐ p = 5 cm + 5 cm + 5 cm + 5 cm = 20 cm **or** $p = 4 \times 5$ cm = 20 cm

1. Find the perimeter of the rectangle.

8 m
6 m ☐

p = ___ + ___ + ___ + ___ = ___ m

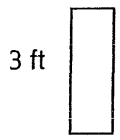
2. Find the perimeter of the square.

3 in.
☐

p = ___ × ___ = ___ in.

Find the perimeter of each figure.

3.



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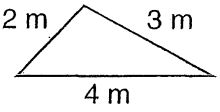

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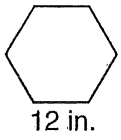

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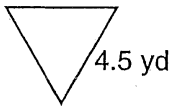

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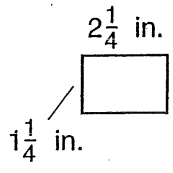

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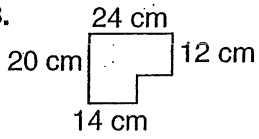

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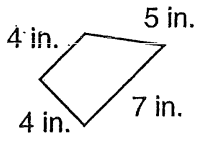


_____

10.

_____

11. A flower garden is in the shape of an equilateral triangle. Each side measures $15\frac{3}{8}$ ft. What is the garden's perimeter? _____

15

Name _____

Area of Squares and Rectangles

R 10-8

You can use formulas to find the area of a square or rectangle.

Find the area of a square that is 7.2 m on each side.

Use the formula $A = s^2$.

$A = (7.2)^2$

$A = 51.84$

The area is 51.84 m^2.

Find the area of a rectangle with a length (l) of 4 cm and a width (w) of 12 cm.

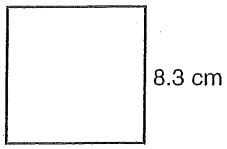
Use the formula $A = l \times w$.

$A = 4 \times 12$

$A = 48$

The area is 48 cm^2.

Find the area of each figure.

1. 

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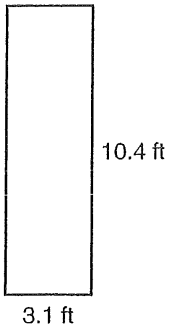
2. 

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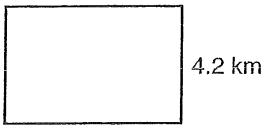
3. 

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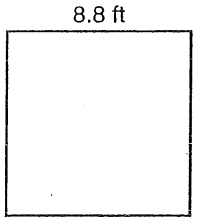
4. 

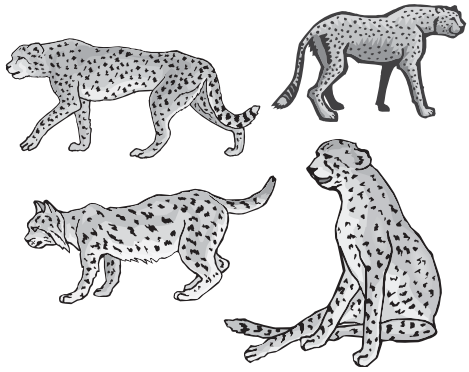
_____

5. **Reasoning** What is the length of a rectangle that has an area of 120 ft^2 and a width of 8 ft? _____

6. **Number Sense** What is the area of a square that is 12.4 cm on each side? _____

Spotted Cats

1 Several members of the cat family have spotted fur. Do you know the difference between a leopard, a jaguar, and a cheetah? From a distance they may appear somewhat similar. Examined at closer range, however, they are clearly different cats. They differ in various ways, including where they live, how big they are, how they move and hunt, and how their fur is marked.



2 Of all the big cats in the wild, the true leopard is found across the largest area. Leopards live in much of Asia and Africa. A leopard grows to be from 3 to 6 feet long, with an added 3 feet of tail. Leopards are skilled climbers that can hunt monkeys in trees. They can also lie in wait and pounce on passing prey. When food sources are scarce, they might eat fruit, field mice, and large insects. Leopard spots are not actually solid spots; they are broken circles.

3 The jaguar is native to the Americas. Its natural range is from the southern United States to northern Argentina, with the largest concentration of jaguars being in Brazil and Central America. The beauty and power of the jaguar inspired worship among ancient peoples. It measures between 3 and 6 feet long without the tail, which adds another 1 ½ to 2 ½ feet. Possessing a large head and body, the jaguar has legs that are shorter and thicker than a leopard's. Jaguars are excellent climbers and can also swim well. They dine on a variety of land, tree, and water creatures. Their fur can be a vivid yellow color or a rusty shade; their "spots" are called rosettes. Each rosette is large and black, consisting of a middle spot with a circle of spots around it.

4 Most cheetahs live in the wilds of Africa. There are also some in Iran and northwestern Afghanistan. The cheetah's head is smaller than the leopard's, and its body is longer. This cat is built for speed. Its legs are much longer than the leopard's, allowing it to run at speeds of up to 70 miles per hour! This incredible ability helps the cheetahs catch their dinner, which is usually an unfortunate antelope. A cheetah's spots are simply black spots, not rosettes or circles.

5 Other spotted cats include the smaller ocelot, mainly of Central and South America, and the lynx or bobcat, mainly of North America. What all of these cats have in common is that they are wild, powerful animals of tremendous grace and beauty.

CSR0P043

9 **All of these are ways to tell the difference between spotted cats *except***

A how big they are.

B what their spots look like.

C where they live.

D how beautiful they are.

CSR00391.043

10 **Which words from the passage are used as persuasion in that they express an attitude of sympathy for animals that are prey to big cats?**

A . . . how they move and hunt . . .

B . . . might eat fruit, field mice, and large insects.

C . . . dinner, which is usually an unfortunate antelope.

D . . . that they are wild, powerful animals . . .

CSR00402.043

11 **Which of these is the *best* summary of this passage?**

A All spotted cats are powerful, beautiful, and graceful.

B Spotted cats may look similar, but they are different in many ways.

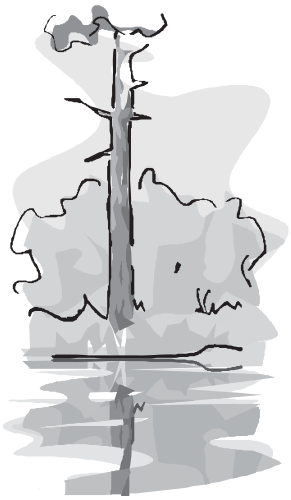
C There are many different spotted cats in the world.

D Spotted cats in the wild hunt many different kinds of animals.

CSR00384.043

Water Picture

by May Swenson



In the pond in the park
all things are doubled:
Long buildings hang and
wriggle gently. Chimneys
are bent legs bouncing
on clouds below. A flag
wags like a fishhook
down there in the sky.

The arched stone bridge
is an eye, with underlid
in the water. In its lens
dip crinkled heads with hats
that don't fall off. Dogs go by,
barking on their backs.
A baby, taken to feed the
ducks, dangles upside-down,
a pink balloon for a buoy.

Treetops deploy a haze of
cherry bloom for roots,
where birds coast belly-up
in the glass bowl of a hill;
from its bottom a bunch
of peanut-munching children
is suspended by their
sneakers, waveringly.

A swan, with twin necks
forming the figure 3,
steers between two dimpled
towers doubled. Fondly
hissing, she kisses herself,
and all the scene is troubled:
water-windows splinter,
tree-limbs tangle, the bridge
folds like a fan.

12 **Read these lines from the poem.**

> Treetops deploy a haze of / cherry bloom for roots,

What does the word deploy mean?

A spread

B hide

C ruin

D grow

CSR11626.245

13 **Read this line from the poem.**

> and all the scene is troubled:

This line refers to the fact that the swan

A is a threat to the other birds.

B has disturbed the still water.

C cannot find the food she seeks.

D distracts from the pond's beauty.

CSR11633.245

14 **How does the poet achieve her tone?**

A She sets the poem in a public park.

B She describes familiar things in a surprising way.

C She uses lines of varying length.

D She contrasts the swan with other birds.

CSR11632.245

15 **How does the poet create a sense of activity in the poem?**

A She compares the bridge to an eye.

B She avoids introducing too many characters in the poem.

C She uses strong, descriptive words.

D She keeps the length of each line fairly short.

CSR11631.245

16 **What is the purpose of the metaphors used throughout the poem?**

A to explain the many uses of water

B to help the reader visualize certain ideas

C to avoid the need for characters

D to show the reader that water is a symbol of life

CSR11636.245

Document B

Youth Volunteer Application Form

Complete all required information and mail these two forms to: Animal Shelter of Sacramento County; 133 Highway 15; Sacramento, CA 94244.

My Information
Name: _____
Street Address: _____
City, State, Zip Code: _____
Date of Birth: ____/____/____
Telephone Number: ( ) ____ - _____

I would like to work as a [check one]: ☐ dog nuzzler ☐ cat snuggler ☐ kennel aide

Days/Hours of Availability [check day/time(s)]: ☐ Saturday ☐ 9–11 ☐ 11–1 ☐ 1–3 ☐ 3–5
☐ Sunday ☐ 9–11 ☐ 11–1 ☐ 1–3 ☐ 3–5

My Adult Sponsor's Information
Name: _____
Street Address: _____
City, State, Zip Code: _____
Date of Birth: ____/____/____
Telephone Number: ( ) ____ - _____
Relationship to Youth Volunteer: _____

Document C

Authorization and Acknowledgment Form

I, _____, the parent or legal guardian of _____, hereby give permission for my child to participate as a youth volunteer with the Animal Shelter of Sacramento County. I authorize Animal Shelter staff to seek immediate medical treatment in case of an accident by using the emergency contact information below. My signature acknowledges that my child has no allergies or other medical conditions that would prohibit participation in this program.

Emergency Contact Information
Contact: _____
Telephone Number: ( ) ____ - _____
Family Physician: _____
Telephone Number: ( ) ____ - _____

CSR2P043

22 **Which 10-year-old child *best* meets the qualifications to be a youth volunteer at the Animal Shelter?**

A Matt, who is allergic to animal fur

B Katie, who likes dogs but does not have an adult sponsor

C Bryan, who can work with either cats or dogs on weekday afternoons

D Amber, who wants to work with cats on Sunday afternoons

CSR20336.043

23 **What is the *first* action that should be taken by a young person who wants to serve as a dog nuzzler?**

A Write a note stating this preference and attach it to the application form.

B Call the director of the Animal Shelter before filling out the application form.

C Call the volunteer information hotline to find out if a dog nuzzler position is available.

D Complete the authorization and acknowledgment form and mail it to the Animal Shelter.

CSR20333.043

24 **Which detail from Document A emphasizes the personal benefits of being a youth volunteer at the Animal Shelter?**

A The Animal Shelter of Sacramento County has volunteer opportunities for people of all ages.

B Children 10 years of age or older are allowed to participate in some of our programs as youth volunteers when accompanied by an adult.

C Youth volunteers learn responsibility as they serve the community.

D Cat snugglers must be knowledgeable about cats and their needs.

CSR20327.043

25 **Read this excerpt from Document C.**

> I, _____, the parent or legal guardian of _____ _____, hereby give permission for my child to participate as a youth volunteer with the Animal Shelter of Sacramento County. I authorize Animal Shelter staff to seek immediate medical treatment in case of an accident by using the emergency contact information below.

The phrase give permission and the word authorize suggest that the parent or legal guardian is able

A to serve as an adult volunteer.

B to give first aid to an injured youth.

C to work as a kennel aide.

D to grant power to others.

CSR20338.043

26 **Which source would provide the *most* information about grooming dogs?**

A a book detailing the care of dogs

B a pamphlet about dog kennels

C a magazine article about the positive effects of owning a dog

D a chart showing the sizes of various breeds of dogs

CSR20332.043

27 **The author implies that large-sized dogs**

A are less comfortable around people.

B are more difficult to handle.

C need more human interaction.

D respond better to youth volunteers.

CSR20334.043

The following is a rough draft of a student's report. It contains errors.

Are We There Yet?

1 Think about a time you went someplace that you had never been before. It was not really far away, but it seemed as if it was taking a really long time to get there. Then you noticed that the return trip did not seem to take nearly as long, even though it was exactly the same distance. Scientists have studied these common observations. They have concluded that our perception of how time passes is sometimes based on the amount of information with which we are dealing. The more information we are getting, the more slowly time seems to pass.

2 On the way to the strange place, we are confronted with unfamiliar sights and sounds, and maybe even smells. We may be reading directions, looking for landmarks, or trying to find a particular road sign. There may be others in the car asking, "When will we get there? Are we there yet?" We are constantly processing and evaluating the information we are receiving.

3 On the return trip, we are somewhat familiar with the route. Now much of the information is not new to us. Our brain now processes the information more efficiently. We are able to ignore a lot of what we see and hear. We remember that it does not require action on our part.

4 In other words, scientists believe that on the way to a new place we see things in great detail. Thus time seems to move slowly. On the return trip we are not paying as much attention to detail. Time seems to pass more quickly.

5 The process could be compared to the first and second days of school. On the first day everything is new and different, and time seems to pass slowly. On the second day, you know what to expect, and your brain spends less time processing new information. The second day of school usually seems to proceed at a more rapid pace.

CSW0P075-3

57 **Which sentence is *best* added to the end of paragraph 3?**

A The driver experiences the same things as the passengers.

B We know what to pay attention to and we screen out the rest.

C I wonder what happens when we do know the route.

D New places do that to all of us.

CSW00421.075

58 **Read these two sentences from paragraph 4.**

> On the return trip we are not paying as much attention to detail. Time seems to pass more quickly.

Which word could *best* be used to join these sentences?

A so

B while

C but

D because

CSW00110.075

59 **Read the last two sentences of paragraph 5.**

> On the second day, you know what to expect, and your brain spends less time processing new information. The second day of school usually seems to proceed at a more rapid pace.

Which word should be added to the beginning of the second sentence?

A However,

B Therefore,

C Although,

D Nevertheless,

CSW00422.075

60 **Which sentence *best* serves as a summary to be added at the end of the report?**

A This is a good illustration of the concept.

B The same phenomenon also occurs in the field of athletics.

C The first and second days of school are stressful times.

D Thus, in a sense, time speeds up when our surroundings become more familiar.

CSW00417.075

CRCT Prep
Grade 6
Reading Comprehension

by Jonathan D. Kantrowitz
Edited by Patricia F. Braccio and Sarah M.W. Espano

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Table of Contents

VULCAN AND HIS INVENTIONS

All the gods and goddesses had perfect bodies, except one. Vulcan, the son of Jupiter and Juno, was a bright, sweet-tempered lad, but he was born disabled. It is said that Juno was so displeased that her baby was imperfect that she threw him down from heaven.

Many tales are told of the wonderful works this god created. He made the first robots—gold and silver handmaidens with mechanical brains and tongues who became his faithful servants. Vulcan also invented the first wheelchairs —moving tripods which carried him around and even scurried out of the way when not in use.

Vulcan worked at a forge on Mount Olympus and there he designed and built brass palaces for the other gods. He made armor which could not be pierced by any weapon. Vulcan also invented special golden shoes for the gods and their horses. These shoes enabled their owners to walk on air and water as easily as they could walk upon land.

The ancients believed that Vulcan had made the thunderbolts they saw descending fearsomely from the sky. Vulcan made them for his father, Jupiter. When Jupiter became angry, they believed, he would hurl these weapons from Mt. Olympus at the earth below.

Vulcan also worked at his forges, which were built inside special mountains on earth. These mountains were hollow, and one could see smoke and flame rising from them. The ancients named these special mountains after the god they believed to work within them. Can you guess the name?

1. Ancient people believed that thunderbolts were a sign of

   A. Jupiter's anger.
   B. Vulcan making shoes.
   C. Juno's displeasure.
   D. Vulcan making robots.

2. The "special mountains" said to hold Vulcan's forges are most likely called

   A. smoky mountains.
   B. hollow hills.
   C. volcanoes.
   D. eminences.

3. How was Vulcan different from the other gods?

   A. He was bright.
   B. He was perfect.
   C. He was sweet-tempered.
   D. He was disabled.

4. In the fourth paragraph, the word *fearsomely* means

   A. carefully.
   B. frighteningly.
   C. fearfully.
   D. quietly.

5. Which of the following statements is an opinion?

   A. Vulcan created special shoes for the gods and their horses.
   B. No weapon could break through the armor that Vulcan had made.
   C. The gods looked ridiculous in Vulcan's golden shoes.
   D. Vulcan created the first form of a wheelchair.

6. The author asks a question about mountains

   A. to show that Vulcan is a real person.
   B. to connect Vulcan's story with real life.
   C. to complain about the dangers of nature.
   D. to prove that all mountains are alike.

7. According to the passage, which of these is true of the gods of ancient Greece?

   A. They were important to the people.
   B. They were actually humans.
   C. They were cruel to one another.
   D. They were hidden away in mountains.

8. Vulcan created many wondrous inventions.
   - List THREE of Vulcan's inventions.
   - Describe HOW these inventions changed his life or the lives of others.

   Use information from the story to support your response.

from "THE RED BADGE OF COURAGE" – Part II

by Stephen Crane

The guns squatted in a row like savage chiefs. They argued with abrupt violence. It was a grim pow-wow. Their busy servants ran hither and thither.

A small procession of wounded men were going drearily toward the rear. It was a flow of blood from the torn body of the brigade.

To the right and to the left were the dark lines of other troops. Far in front he thought he could see lighter masses protruding in points from the forest. They were suggestive of unnumbered thousands.

Once he saw a tiny battery go dashing along the line of the horizon. The tiny riders were beating the tiny horses.

From a sloping hill came the sound of cheerings and clashes. Smoke welled slowly through the leaves.

Batteries were speaking with thunderous oratorical effort. Here and there were flags, the red in the stripes dominating. They splashed bits of warm color upon the dark lines of troops.

The youth felt the old thrill at the sight of the emblems. They were like beautiful birds strangely undaunted in a storm.

As he listened to the din from the hillside, to a deep pulsating thunder that came from afar to the left, and to the lesser clamors which came from many directions, it occurred to him that they were fighting, too, over there, and over there, and over there. Heretofore he had supposed that all the battle was directly under his nose.

As he gazed around him the youth felt a flash of astonishment at the blue, pure sky and the sun gleamings on the trees and fields. It was surprising that Nature had gone tranquilly on with her golden process in the midst of so much devilment.

1. According to the passage, the word *emblems* means

   A. shapes.
   B. scenery.
   C. soldiers.
   D. symbols.

2. By the end of the passage, what did the youth come to realize?

   A. He had the power to change the things around him.
   B. The troops on both sides of the battle were the same.
   C. Nature continued to go on even in troubled times.
   D. The battle was much smaller than he had first imagined.

3. Which word BEST describes the mood of this passage?

   A. hopeful
   B. cheerful
   C. wild
   D. angry

4. Which of the following BEST describes how the youth felt about the flag?

   A. He was pleased every time he saw it.
   B. He felt that the flag was too small.
   C. He was fearful every time he saw it.
   D. He felt that the flag was too colorful.

5. Imagine that you are the youth in the story. Write a letter to a friend that explains how you feel about the battle. Use details from the passage that show how the youth feels about the battle.

When Robert Frost's father died in 1885, Robert was eleven years old. The family left California. They settled in Massachusetts. Frost attended Lawrence High School. He later married the girl who had tied him there for the best grades. He then entered Dartmouth College. He remained there less than one semester. Returning to Massachusetts, Frost taught school. He also worked in a mill and as a newspaper reporter. From 1897 to 1899, he attended Harvard College as a special student. He left without a degree. Over the next ten years, he wrote (but rarely published) poems and operated a farm in Derry, New Hampshire. Frost supplemented his income by teaching at Pinkerton Academy.

THREE POEMS

by Robert Frost

"Fire and Ice"

Some say the world will end in fire,
Some say in ice.
From what I've tasted of desire
I hold with those who favour fire.
But if it had to perish twice,
I think I know enough of hate
To say that for destruction ice
Is also great
And would suffice.

"Stopping by Woods on a Snowy Evening"

Whose woods these are I think I know.
His house is in the village though;
He will not see me stopping here
To watch his woods fill up with snow.
My little horse must think it queer
To stop without a farmhouse near
Between the woods and frozen lake
The darkest evening of the year.
He gives his harness bells a shake
To ask if there is some mistake.
The only other sound's the sweep
Of easy wind and downy flake.
The woods are lovely, dark and deep.
But I have promises to keep,
And miles to go before I sleep,
And miles to go before I sleep.

"The Road Not Taken"

Two roads diverged in a yellow wood,
And sorry I could not travel both
And be one traveler, long I stood
And looked down one as far as I could
To where it bent in the undergrowth;
Then took the other, as just as fair,
And having perhaps the better claim,
Because it was grassy and wanted
wear;
Though as for that the passing there
Had worn them really about the same,
And both that morning equally lay
In leaves no step had trodden black.
Oh, I kept the first for another day!
Yet knowing how way leads on to way,
I doubted if I should ever come back.
I shall be telling this with a sigh
Somewhere ages and ages hence:
Two roads diverged in a wood, and I—
I took the one less traveled by,
And that has made all the difference.

1. To which of the following senses do the first two lines of "Fire and Ice" appeal?

   A. sight
   B. smell
   C. hearing
   D. touch

2. What does the speaker in "Stopping by Woods on a Snowy Evening" want to do?

   A. meet the farmer
   B. stay in the woods
   C. get back home
   D. go to sleep

3. In "Stopping by Woods on a Snowy Evening," why doesn't the speaker remain to watch the snow fall in the woods?

   A. The owner of the woods will be returning soon.
   B. The horse is warning him that danger is near.
   C. The evening is too cold to be standing outside.
   D. The speaker has certain places he needs to be.

4. Which word BEST describes the mood in "Stopping by Woods on a Snowy Evening"?

   A. bored
   B. reflective
   C. foolish
   D. cowardly

5. At the end of "The Road Not Taken," how does the speaker feel?

   A. The speaker wishes that he could live his life over again.
   B. The speaker prefers to take walks in the morning.
   C. The speaker is happy with how his life has turned out.
   D. The speaker thinks that he missed his one chance to fall in love.

6. Many poets today do not use rhyme. Robert Frost once said that he would just as soon play tennis without a net than write poetry without rhyme. How important do you think rhyming is to good poetry? Why? Use details from the poems in your answer.

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   - List THREE of Vulcan's inventions.
   - Describe HOW these inventions changed his life or the lives of others.

   Use information from the story to support your response.

Name: _____

Nonfiction Reading Test
Google

Directions: Read the following passage and answer the questions that follow. Refer to the text to check your answers when appropriate.

You know that you're doing something big when your company name becomes a verb. Ask Xerox. In 1959 they created the first plain paper copy machine. It was one of the most successful products ever. The company name Xerox grew into a verb that means "to copy," as in "Bob, can you Xerox this for me?" Around 50 years later, the same thing happened to Google. Their company name grew into a verb that means "to do an internet search." Now everyone and their grandma knows what it means to Google it.

Unlike Xerox, Google wasn't the first company to invent their product, not by a long shot. Lycos released their search engine in 1993. Yahoo! came out in 1994. AltaVista began serving results in 1995. Google did not come out until years later, in 1998. Though a few years difference may not seem like much, this is a major head start in the fast moving world of tech. So how did Google do it? How did they overtake their competitors who had such huge leads in time and money? Maybe one good idea made all the difference.

There are millions and millions of sites on the internet. How does a search engine know which ones are relevant to your search? This is a question that great minds have been working on for decades. To understand how Google changed the game, you need to know how search engines worked in 1998. Back then most websites looked at the words in your query. They counted how many times those words appeared on each page. Then they might return pages where the words in your query appeared the most. This system did not work well and people often had to click through pages and pages of results to find what they wanted.

Google was the first search engine that began considering links. Links are those blue underlined words that take you to other pages when you click on them. Larry Page, cofounder of Google, believed that meaningful data could be drawn from how those links connect. Page figured that websites with many links pointing at them were more important than those that had few. He was right. Google's search results were much better than their rivals. They would soon become the world's most used search engine.

It wasn't just the great search results that led to Google becoming so well liked. It also had to do with the way that they presented their product. Most of the other search engines were cluttered. Their home pages were filled with everything from news stories to stock quotes. But Google's homepage was, and still is, clean. There's nothing on it but the logo, the search box, and a few links. It almost appears empty. In fact, when they were first testing it, users would wait at the home page and not do anything. When asked why, they said that they were, "waiting for the rest of the page to load." People couldn't imagine such a clean and open page as being complete. But the fresh design grew on people once they got used to it.

These days Google has its hands in everything from self-driving cars to helping humans live longer. Though they have many other popular products, they will always be best known for their search engine. The Google search engine has changed our lives and our language. Not only is it a fantastic product, it is a standing example that one good idea (and a lot of hard work) can change the world.

1. Which event happened last?

a. Lycos released their search engine.
b. Yahoo! released their search engine.
c. Google released their search engine.
d. Xerox released their copy machine.

2. Which statement would the author of this text most likely **disagree** with?

a. Part of Google's success is due to the design of their homepage.
b. Google succeeded by following examples of others in their field.
c. Google wasn't the first search engine, but it was the best.
d. Google's success may not have been possible without Larry Page.

3. Which best expresses the main idea of the third paragraph?

a. There are lots and lots of websites connected to the internet.
b. Google created a better way to organize search results.
c. Many smart people have worked on search engines over the years.
d. Older search engines used unreliable methods to order results.

4. What is the author's main purpose in writing this article?

a. To explain how Google overtook its rivals
b. To compare and contrast Google and Xerox
c. To persuade readers to use Google for internet searches
d. To discuss how companies can influence language over time

5. Which statement would the author most likely **agree** with?

a. Google became successful because its founders were well-connected.
b. Google was the world's first and best search engine.
c. Google changed the world by solving an old problem in a new way.
d. Google's other products are now more important to its success than search.

6. Which best expresses the main idea of the fourth paragraph?

a. Links allow people to surf from one website to the next.
b. Larry Page's ideas about links helped Google get to the top.
c. Larry Page contributed to the internet by inventing the link.
d. Google is a website that serves important links to users.

7. Which best explains why the author discusses Xerox in this text?

a. He is discussing big companies that came before Google.
b. He is explaining how companies must change with the times.
c. He is showing how companies can affect our language.
d. He is comparing and contrasting Google and Xerox.

8. How did Google improve search quality in 1998?

a. They counted how many times queries appeared on each page.

b. They looked more closely at the words in search queries.

c. They linked to more pages.

d. They studied the relationships of links.

9. Which was cited as a reason why Google became so popular?

a. Google's homepage was clean.

b. Google provided catchy news stories on their homepage.

c. Google homepage loaded quickly.

d. Google provided useful stock quotes on their homepage.

10. Which title best expresses the author's main purpose in writing this text?

a. *Xerox Vs. Google: Battle of the Titans*

b. *Search Engines: How They Work and Why They're Important*

c. *A Better Way: How Google Rose to the Top*

d. *Search Engines: A Short History of Important Tools*

Long Response

1. What can readers learn about Google's approach to doing business based on reading this article? Use information from the text to support your response.

2. Explain how Google was able to overcome its competitors. Cite information from the text to support your response.

3. What do Google and Xerox have in common? Support your answer with information from the text.

Name: _____

Author's Purpose Worksheet 6

Directions: read the description, determine the author's purpose, and then explain your answer.

1. A handbook teaching people how to negotiate

Author's Purpose:
(to inform, persuade, or entertain) _____

How do you know? Write a sentence explaining your answer.

2. A public service announcement telling kids to stay in school

Author's Purpose:
(to inform, persuade, or entertain) _____

How do you know? Write a sentence explaining your answer.

3. A menu for a local pizzeria listing the sizes and prices of pizzas and available toppings

Author's Purpose:
(to inform, persuade, or entertain) _____

How do you know? Write a sentence explaining your answer.

4. A song about pizza by popular music artist, Miss Directed

Author's Purpose:
(to inform, persuade, or entertain) _____

How do you know? Write a sentence explaining your answer.

5. The track listing to Miss Directed's album, *I Want Pizza*, which shows the order, length, and producer of each song

Author's Purpose:
(to inform, persuade, or entertain) _____

How do you know? Write a sentence explaining your answer.

6. A radio commercial script calling Miss Directed's new album, "The soundtrack of our lives."

Author's Purpose:
(to inform, persuade, or entertain) _____

How do you know? Write a sentence explaining your answer.

7. A pie graph showing how many pies were sold in each flavor during November last year

Author's Purpose:
(to inform, persuade, or entertain) _____

How do you know? Write a sentence explaining your answer.

8. A children's book about a cherry pie and an apple pie that overcome their differences to become good friends

Author's Purpose:
(to inform, persuade, or entertain) _____

How do you know? Write a sentence explaining your answer.

9. A bookmark by the American Dairy Association listing 10 reasons to drink milk

Author's Purpose:
(to inform, persuade, or entertain) _____

How do you know? Write a sentence explaining your answer.

10. A Sunday comic strip that tackles serious issues like immigration and health care

Author's Purpose:
(to inform, persuade, or entertain) _____

How do you know? Write a sentence explaining your answer.

11. A cell phone application that suggests dozens of recipes based on what ingredients you have

Author's Purpose:
(to inform, persuade, or entertain) _____

How do you know? Write a sentence explaining your answer.

Name: _____

Characterization Worksheet 3

Directions: Read the short passages. Answer the question by identifying an implied character trait. Explain your answer by referencing the text.

1. Daren showed up at the banquet with food stains all over his dress shirt. He sat down, put his feet on the table, and burped loudly. The other people sitting at the table looked at each other but continued eating.

What character trait does Daren demonstrate? _____

Explain your answer by referencing the text.

2. Diamond spent twelve hours working on her Popsicle stick White House yesterday. Today she noticed that there are bushes in front of the building, so she spent another six hours making bushes out of construction paper.

What character trait does Diamond demonstrate? _____

Explain your answer by referencing the text.

3. Courtney asked her neighbor if she could borrow an egg to complete a recipe that she had already started. The next day Courtney returned an egg to her neighbor along with a thank you card expressing her sincere gratitude.

What character trait does Courtney demonstrate? _____

Explain your answer by referencing the text.

4. When Angela asked her mother if she could go to the party, her mother said that she could not. So Angela asked her father, who said that she could. She then played her parents off one another until she got her way. Angela enjoyed herself at the party.

What character trait does Angela demonstrate? _____

Explain your answer by referencing the text.

5. Kelvin found a wallet on the ground. He opened up the wallet and saw an old woman's ID card. Kelvin took the money out of the wallet and threw the wallet in a ditch.

What character trait does Kelvin demonstrate? _____

Explain your answer by referencing the text.

6. Kelly likes Aaron because they have many things in common. They have formed a great connection and she thinks that Aaron is very handsome, but Kelly wants to date Burt. Even though Kelly had nothing is common with Burt, he drives a fancy car and he spends a lot of money. She likes this about him.

What character trait does Kelly demonstrate? _____

Explain your answer by referencing the text.

7. Brad spends two to four hours a day grooming himself. This regimen includes an extensive time period during which Brad lovingly admires his appearance in the mirror.

What character trait does Brad demonstrate? _____

Explain your answer by referencing the text.

8. Jared got off the train from his small farm village. He was now in the big city. An unshaven man with a trench coat with several holes in it approached Jared and told him that he was a police officer and that he needed to see Jared's wallet. Jared did not think that the man looked like a police officer, but he didn't want to get arrested on his first day in the city, so Jared reached into the front pocket of his overalls and gave the man his wallet. The man promptly ran away leaving Jared with no money.

What character trait does Jared demonstrate? _____

Explain your answer by referencing the text.

9. It was the bottom of the ninth inning and the home team was down by one. There was a man on second base when Bruce stepped up to the plate. Bruce pointed to right field. The pitcher threw his fastball. Bruce got a hold of it and sent it flying to right field. The home team won.

What character trait does Bruce demonstrate? _____

Explain your answer by referencing the text.

10. Kathy has a big project due in two weeks. She spends the next twelve days interacting with people from her school on social networks. The night before the project is due, she rushes to complete it and gets a C- as a final grade. She was happy with the grade.

What character trait does Kathy demonstrate? _____

Explain your answer by referencing the text.

Name: _____

Context Clues 1.3

Directions: read each sentence and determine the meaning of the word using cross sentence clues or your prior knowledge. Then, explain what clues in the sentence helped you determine the word meaning.

1. **unpleasant:** Brian felt that Ms. Golding was much more **unpleasant** than usual and he suspected that she did not have her coffee this morning.

Definition: _____

What clues in the sentence lead you to your definition?

2. **remedy:** The richest man in town was losing his hearing and he offered a large reward to anyone who could find a **remedy** for his condition.

Definition: _____

What clues in the sentence lead you to your definition?

3. **singe:** The curling iron was so hot that Martha **singed** her hair when she tried using it.

Definition: _____

What clues in the sentence lead you to your definition?

4. **quarrel:** Max was sick of **quarreling** with his wife about money when all he wanted to do was enjoy her company.

Definition: _____

What clues in the sentence lead you to your definition?

5. **conclude:** After finding crumbs all over Fido's bed, Mom **concluded** that the dog had eaten the cookies.

Definition: _____

What clues in the sentence lead you to your definition?

6. **enormous:** After taking the final exam, Felix felt as though an **enormous** burden had been lifted.

Definition: _____

What clues in the sentence lead you to your definition?

7. **haughty:** Megan did not like the new girl because she was rich, **haughty,** and kept her nose up high.

Definition: _____

What clues in the sentence lead you to your definition?

8. **dreary:** After the quarterback from the visiting team snuck in for another touchdown, the mood over the home team's bleachers grew quite **dreary**.

Definition: _____

What clues in the sentence lead you to your definition?

9. **dispute:** My father and Mr. McClure, our neighbor, have had a **dispute** as to the property line separating our two houses ever since Mr. McClure planned to build a fence.

Definition: _____

What clues in the sentence lead you to your definition?

10. **absurd:** Bobby thought that Clyde's theories about their substitute teacher being an alien were **absurd**.

Definition: _____

What clues in the sentence lead you to your definition?

11. **involuntary:** As a student serving a detention, Derrick's participation on the school cleanup crew was **involuntary,** unlike Scott, who genuinely wanted to make the school a better place.

Definition: _____

What clues in the sentence lead you to your definition?

12. **native:** Unlike most of the college students, who came to DeKalb from many different parts of the state and nation to attend the university, Cletus was a **native** of the town, born and raised.

Definition: _____

What clues in the sentence lead you to your definition?

Bonus: Define each of the words on a separate sheet of paper to check your answers. Attach your sheet.

Tennessee Comprehensive Assessment Program

TCAP

TNReady — Grade 6 Math Part I

PRACTICE TEST

Student Name

Teacher Name

Tennessee Department of Education

Directions

This Practice Test booklet contains sample items for Grade 6 Math. Write your answers in this Practice Test booklet.

You MAY use a calculator with all test items in this test booklet.

Sample A: Selected-Response

Circle **all** expressions equivalent to 4(9 + 3).

A. 4(12)

B. 36 + 3

C. 36 + 12

D. 4 + (9 + 3)

E. (9 + 3) + (9 + 3) + (9 + 3) + (9 + 3)

Sample B: Table

Select **True** or **False** to indicate whether each comparison is true.

	True	False
$3^2 < \frac{4}{9} + \frac{2}{3}$		
$2(2^3 + 14 \bullet 2) \geq 9 \bullet 8$		
$16.2 \bullet 3 - 24.6 < 72 \div 3 + 2.78$		

Sample Answers

A. A, C, E

B. False, True, True

1. At a bake sale, plates of cookies, p, are sold for \$5 each. The amount of money from the sale of cookies is expressed as dollars, d. Which equation represents the earnings of the bake sale?

Plates of Cookies (p)	Earnings (d)
1	5
2	10
3	15
4	20

A. $p = 5d$

B. $d = p + 5$

C. $d = \frac{p}{5}$

D. $d = 5p$

2. The table shows the number of hours Emma babysat and her earnings.

Hours	Earnings
3	\$12
5	\$20
7	?
9	\$36

How much did Emma earn when she babysat for 7 hours?

A. \$22

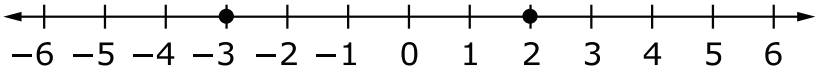
B. \$24

C. \$28

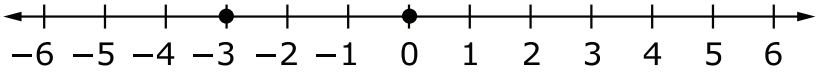
D. \$32

3. Circle the number line on which a number and its opposite are plotted.

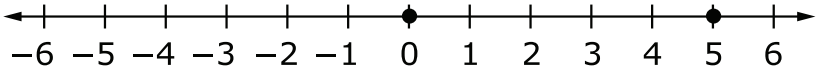
A.



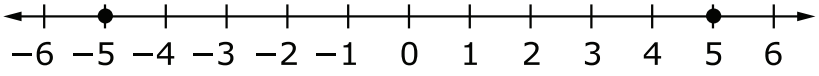
B.



C.



D.



4. Brandon has $50 in his savings account. He plans to deposit $20 into his savings account each month. Select **all** expressions that could be used to find the amount of money Brandon will have in his savings account after x months of making deposits.

A. $20x - 50$

B. $20x + 50$

C. $20 + 50x$

D. $20 + 50 + x$

E. $50 + 20x$

5. What is the distance between the points (11, –7) and (2, –7) on a coordinate plane, in units?

A. 13

B. 9

C. 5

D. 0

6. Brian paid $27 for 12 gallons of gasoline. To the nearest cent, how much did one gallon of gasoline cost?

A. $0.44

B. $2.00

C. $2.25

D. $15.00

7. The table below lists the number of gallons of gas required to drive the given number of miles for four different cars.

Car	Miles Driven	Gallons of Gas
A	416	13
B	544	16
C	665	19
D	775	25

Part A

What is the unit rate for each car, in miles per gallon?

Car A ____ Car B ____

Car C ____ Car D ____

Part B

Which car uses the **least** amount of gas?

A. Car A

B. Car B

C. Car C

D. Car D

Part C

Car A is traveling from Memphis, TN, to Johnson City, TN, and then returning. The distance is 496 miles each way. How many gallons of gas will Car A need to make the round trip?

____

Part D

Gas costs an average of $2.12 per gallon. How much will be spent on gas for the trip for Car A?

____

Part E

If Car A has an average speed of 68 miles per hour, how many hours of driving time will the round trip require? Round your answer to the nearest hour.

____

8. Arianna has fabric that is $\frac{3}{4}$ yard long. She needs to cut the fabric into pieces that are $\frac{1}{8}$ yard long. How many $\frac{1}{8}$-yard-long pieces will she have?

Write your answer in the space provided.

9. What is the value of $1500 \div (6^2 + 4^3) \bullet 37$?

10. What is the value of $6(x + 15) - 12$ when $x = 12$?

11. Select the value of r that makes $8r = 24$ true.

A. $\frac{1}{3}$

B. 3

C. 16

D. 32

12. Sandra earns $380 for working 20 hours. How much does she earn per hour?

A. $360

B. $190

C. $19

D. $18

Tennessee Comprehensive Assessment Program

TCAP

TNReady — Grade 6 Math Part II

PRACTICE TEST

Student Name

Teacher Name

Tennessee Department of Education

Directions

Subtest 1 of this Practice Test booklet contains sample items for Grade 6 Math. Write your answers in this Practice Test booklet.

You MAY NOT use a calculator in Subtest 1 of this test booklet.

Sample A: Selected-Response

Circle **all** expressions equivalent to 4(9 + 3).

A. 4(12)

B. 36 + 3

C. 36 + 12

D. 4 + (9 + 3)

E. (9 + 3) + (9 + 3) + (9 + 3) + (9 + 3)

Sample B: Table

Select **True** or **False** to indicate whether each comparison is true.

	True	False
$3^2 < \frac{4}{9} + \frac{2}{3}$		
$2(2^3 + 14 \bullet 2) \geq 9 \bullet 8$		
$16.2 \bullet 3 - 24.6 < 72 \div 3 + 2.78$		

Sample Answers

A. A, C, E

B. False, True, True

1. In the coordinate plane, the point located at (−3, 4) was reflected and is now located at (3, 4). Which statement describes how the point was reflected?

A. The point was reflected across the *x*-axis.

B. The point was reflected across the *y*-axis.

C. The point was reflected across the *x*-axis, then the *y*-axis.

D. The point was reflected across the *y*-axis, then the *x*-axis.

2. What is the product of 3.28 and 2.9?

A. 0.618

B. 6.18

C. 9.512

D. 3.608

3. Select the expression that shows 54 + 48 using the greatest common factor times the sum of two numbers.

A. 2(27 + 24)

B. 3(18 + 17)

C. 4(13 + 12)

D. 6(9 + 8)

4. Gretchen surveyed students at her school. She wanted to find out how many hours students spent on homework each week. Which survey group would give her the **most** accurate result?

A. girls in the cafeteria

B. boys in gym classes

C. students in language arts classes

D. students on the school's basketball team

5. Bananas cost $0.59 per pound. Write an equation that could be used to find the total cost, *y*, of *x* pounds of bananas.

Write your answer in the space provided.

6. Enter the value of *w* that makes this equation true:

$$w + 4\frac{1}{5} = 13\frac{19}{20}$$

Write your answer in the space provided.

7. Select **all** of the expressions that are equivalent to $4 + w + 12w$.

A. $4 + 13w$

B. $13w^2 + 4$

C. $2(2 + 6w) + w$

D. $16 + 2w$

E. $2(2 + 6w^2)$

8. In the blanks before the sentences below, write:

S for "Statistical question" or
N for "Not a statistical question."

_____ How many minutes does each sixth-grade student read every night?

_____ How many minutes does each teacher in your school read each night?

_____ How many books did your family read this month?

_____ Out of all the families that attend last month's book fair, how many books has each family read this month?

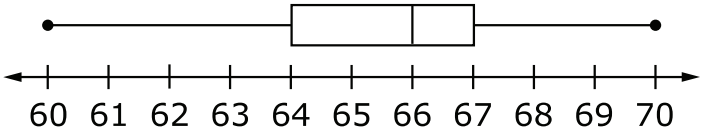
_____ How many minutes do you read every night?

9. The heights, in inches, of each of the players on a girls' basketball team are shown.

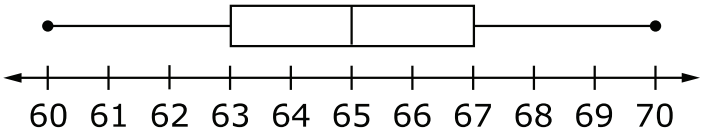
66, 65, 66, 70, 66, 68, 63, 60, 66, 68, 63, 65

Which box plot correctly represents the data?

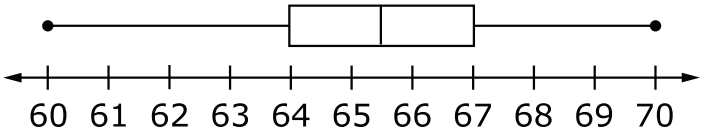
A.



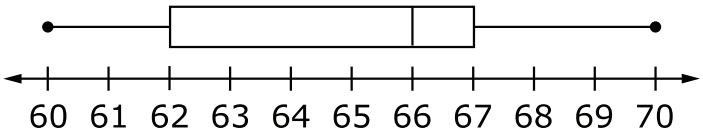
B.



C.



D.



10. Quinn is playing in a trivia competition. He earns 50 points for each correct response, c. He loses 25 points for each wrong response, w. Which expression represents Quinn's total points in the trivia competition?

A. $50c + 25w$

B. $25c$

C. $25c - 50w$

D. $50c - 25w$

Directions

Subtest 2 of this Practice Test booklet contains sample items for Grade 6 Math. Write your answers in this Practice Test booklet.

You MAY use a calculator in Subtest 2 of this test booklet.

11. The store has 40 bags of potato chips on the shelf. Of those, 30 bags are cheddar-flavored. What percentage of the bags of potato chips are **not** cheddar-flavored?

Write your answer in the space provided.

12. Janelle scored 88, 100, 76, 92, and 83 on her math tests. She has to take one more test. What is the **lowest** score Janelle can earn on her last test and still achieve a mean of **at least** 85?

A. 71

B. 76

C. 82

D. 85

13. Select **each** expression that shows a correct method for finding 36% of 400.

A. $36 \bullet 400$

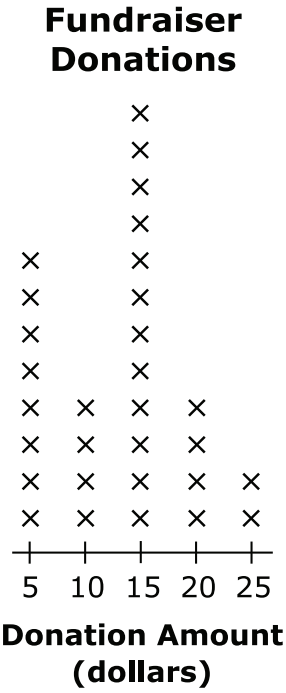
B. $\frac{36}{100} \bullet 400$

C. $0.36 \bullet 400$

D. $\frac{0.36}{100} \bullet 400$

E. $\frac{3.6}{100} \bullet 400$

14. The line plot shows the dollar amounts of fundraiser donations.



Which is a measure of center for the data?

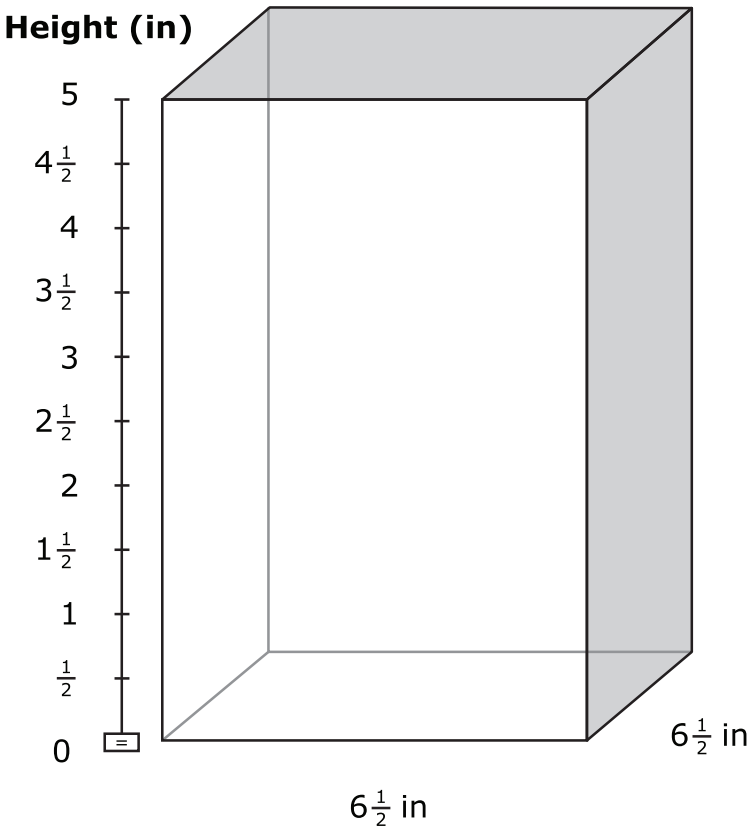
A. 13

B. 20

C. 25

D. 29

15. Randy fills the prism shown with $126\frac{3}{4}$ cubic inches of sugar.



What is the height of sugar Randy put in the prism?

Write your answer in the space provided.

16. A gallon of gas costs \$2.50. Use the equation $p = 2.5g$ to find a total cost with price, p, and gallons, g. Draw lines to match the number of gallons of gas with the corresponding total price.

10 gallons	\$40.00
8 gallons	\$20.00
16 gallons	\$25.00

17. Which expression is equivalent to the product of 6 and y?

A. $6 + y$

B. $6 - y$

C. $\frac{6}{y}$

D. $6 \times y$

18. The area of a rectangular patio is $90\frac{3}{10}$ square feet. The length is $10\frac{1}{2}$ feet. What is the width, in feet, of the patio?

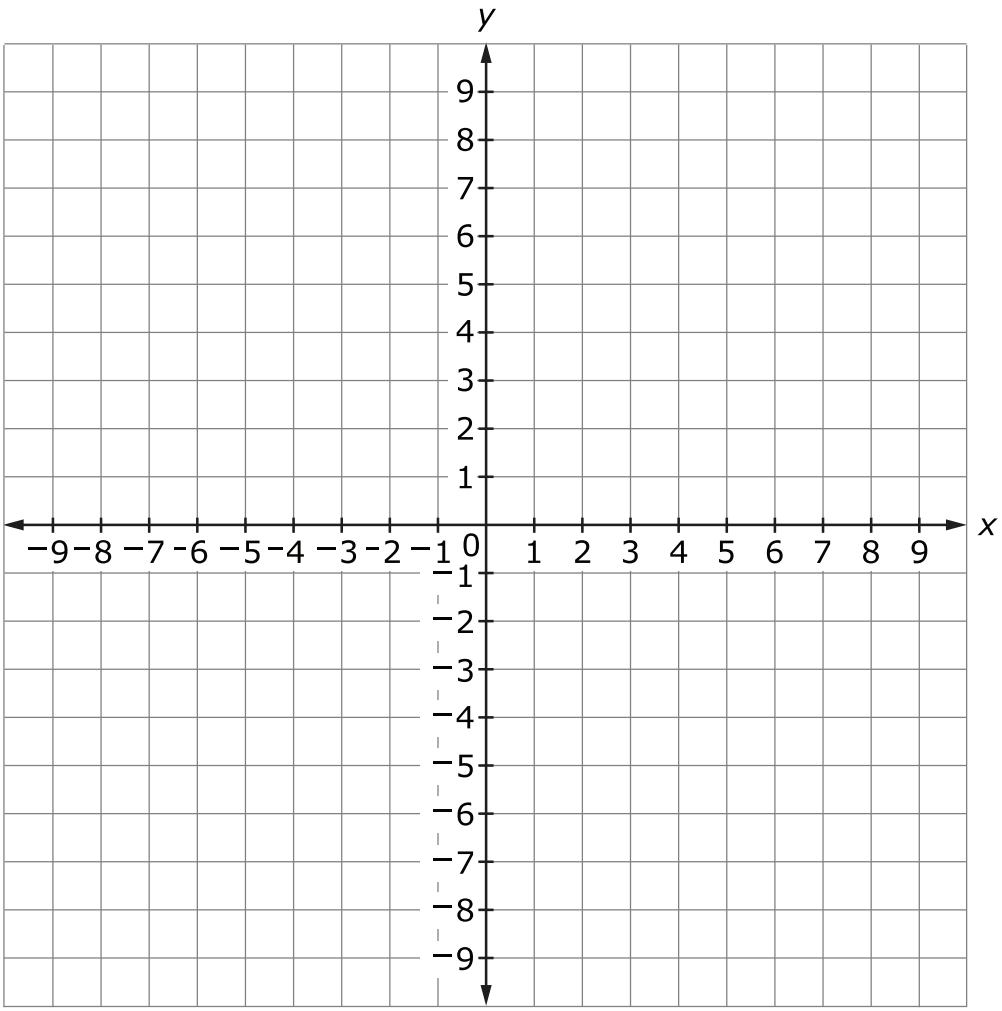
A. $\frac{5}{43}$

B. $8\frac{3}{5}$

C. $79\frac{4}{5}$

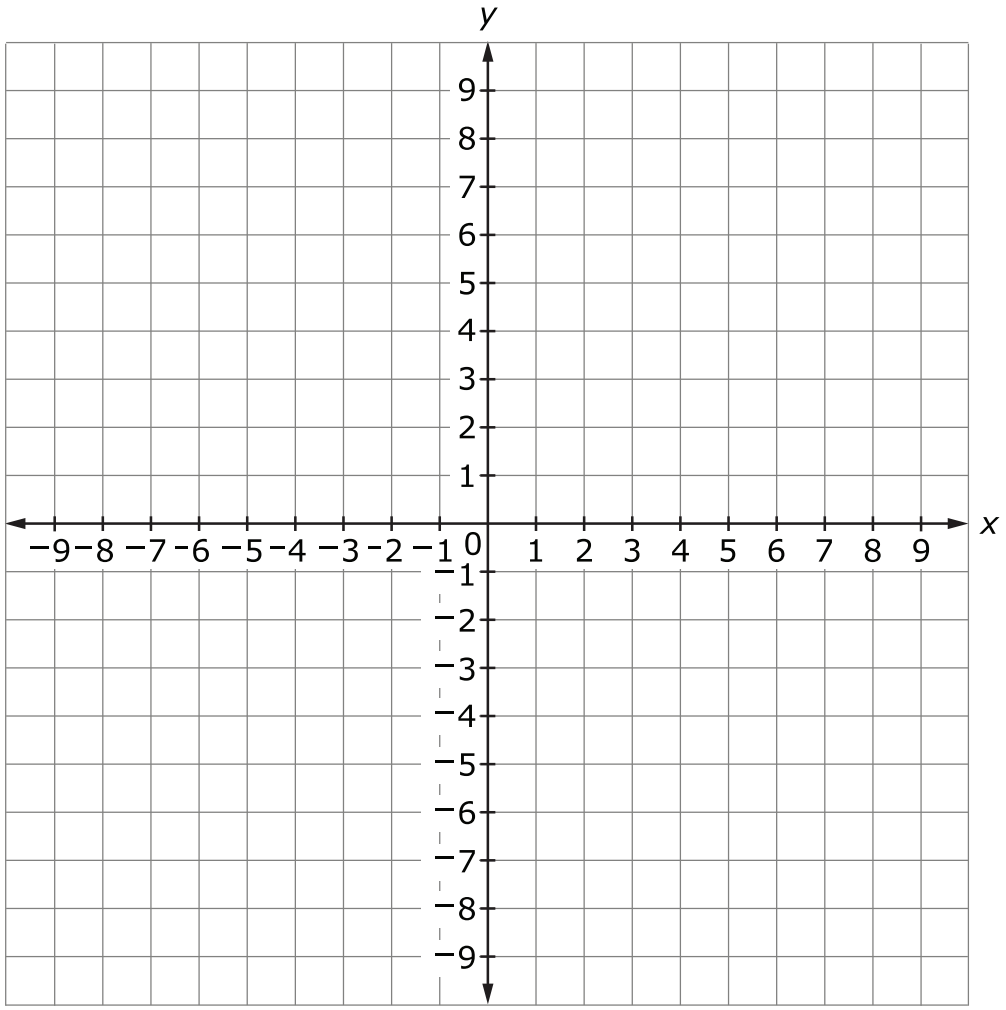
D. $948\frac{3}{20}$

19. Plot the point (–4, 6) on the coordinate plane.



20. ***Part A***

On the coordinate plane, draw a right triangle with vertices $X(-3, 3)$, $Y(-3, -3)$, and $Z(5, -3)$.

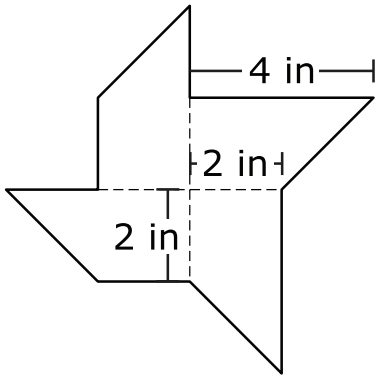


Part B

Line segment XZ is 10 units long. How many units is the perimeter of the right triangle?

Write your answer in the space provided.

21. A pinwheel's four blades are all congruent right trapezoids.



What is the combined area of the four blades, in square inches?

A. 8

B. 16

C. 24

D. 32

Adding unlike fractions (denominators 2-12)

Grade 6 Fraction Worksheet

Find the sum of the following fractions.

1. $\frac{4}{5} + \frac{9}{11} =$ _____

2. $\frac{5}{6} + \frac{2}{9} =$ _____

3. $\frac{5}{9} + \frac{3}{8} =$ _____

4. $\frac{2}{12} + \frac{5}{8} =$ _____

5. $\frac{6}{11} + \frac{2}{3} =$ _____

6. $\frac{1}{4} + \frac{7}{10} =$ _____

7. $\frac{5}{6} + \frac{6}{12} =$ _____

8. $\frac{2}{7} + \frac{3}{7} =$ _____

9. $\frac{1}{2} + \frac{2}{6} =$ _____

10. $\frac{1}{3} + \frac{3}{12} =$ _____

Adding unlike fractions (denominators 2-12)

Grade 6 Fraction Worksheet

Find the sum of the following fractions.

1. $\frac{4}{5} + \frac{9}{11} = 1\frac{34}{55}$

2. $\frac{5}{6} + \frac{2}{9} = 1\frac{1}{18}$

3. $\frac{5}{9} + \frac{3}{8} = \frac{67}{72}$

4. $\frac{2}{12} + \frac{5}{8} = \frac{19}{24}$

5. $\frac{6}{11} + \frac{2}{3} = 1\frac{7}{33}$

6. $\frac{1}{4} + \frac{7}{10} = \frac{19}{20}$

7. $\frac{5}{6} + \frac{6}{12} = 1\frac{1}{3}$

8. $\frac{2}{7} + \frac{3}{7} = \frac{5}{7}$

9. $\frac{1}{2} + \frac{2}{6} = \frac{5}{6}$

10. $\frac{1}{3} + \frac{3}{12} = \frac{7}{12}$

Answers and Options for Further Review

REVIEW 1

If students need more help on adding and subtracting whole numbers, use F36 and F37 in the Math Diagnosis and Intervention System.

1. 201	2. 615	3. 1,109	4. 179
5. 198	6. 980	7. 564	8. 90
9. 31		10. 109	
11. 279		12. 221	
13. 588		14. 1,301	
15. 1,296		16. 2,109	
17. 491 cards			

REVIEW 2

If students need more help on adding and subtracting decimals, use I17 in the Math Diagnosis and Intervention System.

1. 15.95	2. 11.05
3. 780.2	4. 8.4
5. 74.97	6. 99.78
7. 244.09	8. 0.27
9. 7.4	10. 0.46
11. 5.44	12. 127.41
13. 530.05	14. 112.91
15. 829.2 mi	16. $5.21

REVIEW 3

If students need more help on multiplying whole numbers, use G59 in the Math Diagnosis and Intervention System.

1. 646	2. 2,408
3. 328	4. 1,196
5. 9,072	6. 7,770
7. 39,195	8. 74,304
9. 5,940	10. 8,800
11. 20,979	12. 49,680
13. 440	14. 640
15. 3,620	16. 4,896 lb
17. 504 miles	

REVIEW 4

If students need more help on multiplying decimals, use I20 through I23 in the Math Diagnosis and Intervention System.

1. 123.2	2. 14.4
3. 1.28	4. 0.015
5. 17.845	6. 0.396
7. 2.142	8. 17.55
9. 10.81	10. 4.5
11. 378	12. 0.088
13. 404	14. 1.47
15. 2,187.5 in.	16. $59.97

REVIEW 5

If students need more help on dividing whole numbers, use G52, G54, G66, and G67 in the Math Diagnosis and Intervention System.

1. 19	2. 66
3. 83	4. 226
5. 319	6. 35
7. 47	8. 35
9. 58	10. 83
11. 40	12. 145
13. 102	14. 365
15. 19 points per game	

REVIEW 6

If students need more help on dividing decimals, use I26 in the Math Diagnosis and Intervention System.

1. 2.3
2. 21.9
3. 15.7
4. 77.7
5. 95.6
6. 9.4
7. 6.7
8. 4.89
9. 33.64
10. 77.89
11. 48.47
12. 17.89
13. $3.79 per roll
14. 12.36 sec

REVIEW 7

If students need more help on problem solving, use M10 and M12 in the Math Diagnosis and Intervention System.

1. division; 33 teams
2. addition; 450.25 lb
3. subtraction; $48.05
4. division; $0.60 per minute
5. multiplication; $4.74

REVIEW 8

If students need more help on interpreting data, use L3, L5, and L25 in the Math Diagnosis and Intervention System.

1. 2 archers
2. 2 bull's eyes
3. April
4. March
5. 1st and 5th
6. About $1,600–$1,700

REVIEW 9

If students need more help on lines and angles, use K46 and K49 in the Math Diagnosis and Intervention System.

1. intersecting and perpendicular
2. parallel
3. intersecting
4. straight
5. obtuse
6. acute
7. right
8. obtuse
9. right
10. straight
11. acute

REVIEW 10

If students need more help on adding and subtracting fractions, use H29 and H31 in the Math Diagnosis and Intervention System.

1. $\frac{11}{12}$
2. $\frac{1}{12}$
3. $\frac{7}{9}$
4. $\frac{5}{7}$
5. $\frac{1}{2}$
6. $\frac{5}{6}$
7. $\frac{2}{15}$
8. $\frac{5}{24}$
9. $\frac{9}{10}$
10. $\frac{9}{10}$
11. $\frac{5}{12}$
12. $\frac{1}{3}$ hour

REVIEW 15

If students need more help on measurement, use K2 and K6 through K10 in the Math Diagnosis and Intervention System.

1. 108
2. 5
3. 300
4. $\frac{1}{2}$
5. 100
6. 40,000
7. 5,000
8. 2,640
9. 104
10. 4,300
11. 25,000
12. $1\frac{2}{3}$
13. 6.7
14. Yes, by 1.2 oz

REVIEW 16

If students need more help on perimeter, use K26 in the Math Diagnosis and Intervention System.

1. 28
2. 12
3. 8 ft
4. 9 m
5. 72 in.
6. 13.5 yd
7. 7 in.
8. 88 cm
9. 20 in.
10. 48 m
11. $46\frac{1}{8}$ ft

REVIEW 17

If students need more help on area, use K25 and K28 through K30 in the Math Diagnosis and Intervention System.

1. 63 in^2
2. 5 ft^2
3. 72 m^2
4. 32 in^2
5. 46.5 cm^2
6. $6\frac{1}{4}$ ft^2
7. 40 in^2
8. 180 mm^2
9. 4.5 yd^2
10. 25 ft^2
11. 75,000 yd^2

REVIEW 18

If students need more help on ratio and proportion, use I30 and I31 in the Math Diagnosis and Intervention System.

1. $\frac{4}{3}$
2. $\frac{4}{3}$
3. yes
4. no
5. yes
6. no
7.

3	6	9	12
5	10	15	20

8.

2	6	12	18
7	21	42	63

9.

4	8	20	40
5	10	25	50

10. 18 in.
11. 8 moons

REVIEW 19

If students need more help on percents, use I36 in the Math Diagnosis and Intervention System.

1. 6
2. 15
3. $\frac{1}{2}$
4. $\frac{3}{4}$
5. $\frac{1}{10}$
6. $\frac{3}{5}$
7. 0.45
8. 0.16
9. 0.78
10. 0.04
11. 8
12. 4
13. 3
14. 6.3
15. 3.5
16. 116
17. 40 students
18. 38 problems

REVIEW 20

If students need more help on probability, use L18 in the Math Diagnosis and Intervention System.

1. $\frac{3}{8}$
2. $\frac{1}{4}$
3. $\frac{1}{3}$
4. $\frac{1}{2}$
5. $\frac{2}{3}$
6. 1
7. $\frac{1}{6}$
8. $\frac{1}{2}$
9. $\frac{2}{3}$
10. $\frac{5}{6}$
11. $\frac{3}{13}$
12. $\frac{2}{7}$

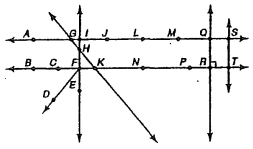
Reteaching

Name _____

Geometric Ideas

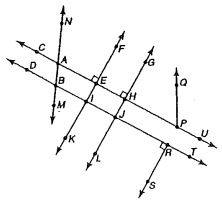
R 9-1

- A **line** is a straight path of points that goes on forever in two directions. Examples: $\overleftrightarrow{AS}$, $\overleftrightarrow{GK}$.
- A **ray** is a part of a line with one endpoint, extending forever in only one direction. Examples: $\overrightarrow{FD}$, $\overrightarrow{FB}$.
- A **line segment** is part of a line with two endpoints. Examples: $\overline{CF}$, $\overline{MQ}$.
- A **midpoint** is the point halfway between the endpoints of a line segment. Example: Point L is halfway between points J and M on $\overline{JM}$.
- **Congruent line segments** are line segments that have the same length. Example: $\overline{QR}$ is congruent to $\overline{ST}$.
- **Parallel lines** are in the same plane but do not intersect. Example: $\overleftrightarrow{AS}$ is parallel to $\overleftrightarrow{BT}$.



Use the diagram at the right. Name the following. **Sample answers:**

1. three line segments
   $\overline{EH}$, $\overline{JR}$, $\overline{BI}$
2. two parallel lines
   $\overleftrightarrow{CU}$, $\overleftrightarrow{DT}$
3. two lines that intersect $\overrightarrow{DT}$
   $\overleftrightarrow{GL}$, $\overleftrightarrow{FK}$
4. two congruent line segments
   $\overline{EH}$, $\overline{IJ}$
5. two lines perpendicular to $\overrightarrow{BR}$
   $\overleftrightarrow{FK}$, $\overleftrightarrow{GL}$
6. two midpoints of line segments
   B on $\overline{DI}$, I on $\overline{BJ}$



Reteaching

Name _____

Fractions, Decimals, and Percents

R 7-2

Fractions, decimals, and percents all name parts of a whole. The grid to the right has 72 out of 100 squares shaded.

72 out of 100 are shaded. As a fraction, that is $\frac{72}{100}$. As a decimal, that is 0.72. As a percent, that is 72%.

Write 40% as a fraction and decimal.

$40\% = \frac{40}{100} = 0.40$

The decimal point moves two places to the left.

Write 0.3% as a fraction and decimal.

$0.3\% = \frac{0.3}{100} = 0.003$

The decimal point moves two places to the left. Fill in any spaces with zeros.

Write 0.47 as a fraction and percent.

$0.47 = \frac{47}{100} = 47\%$

Write $\frac{3}{4}$ as a decimal and percent.

You can use a proportion:

$\frac{3}{4} = \frac{n}{100}$

$\frac{4n}{4} = \frac{300}{4}$

$n = 75$

So, $\frac{3}{4} = 0.75 = 75\%$.

Write each in two other ways.

1. $\frac{2}{10}$	**0.20**	**20%**
2. $\frac{23}{100}$	**0.23**	**23%**
3. $\frac{7}{10}$	**0.7**	**70%**
4. 97%	**$\frac{97}{100}$**	**0.97**
5. 16%	**0.16**	**$\frac{16}{100}$** or **$\frac{4}{25}$**
6. 52%	**0.52**	**$\frac{52}{100}$** or **$\frac{13}{25}$**
7. 0.04	**4%**	**$\frac{4}{100}$** or **$\frac{1}{25}$**
8. 0.35	**35%**	**$\frac{35}{100}$** or **$\frac{7}{20}$**

9. **Number Sense** Sheila got 87% of the problem correct. Patrick got $\frac{91}{100}$ correct. Who scored higher?
   Patrick

Reteaching

Name _____

Multiplying Mixed Numbers

R 5-4

How to find the product of two mixed numbers:

Find $3\frac{2}{3} \times 4\frac{1}{2}$.

Step 1

Estimate by rounding.

$3\frac{2}{3} \times 4\frac{1}{2}$

$\downarrow \quad \downarrow$

$4 \times 5 = 20$

Then write each mixed number as an improper fraction.

$3\frac{2}{3} \times 4\frac{1}{2}$

$\downarrow \quad \downarrow$

$\frac{11}{3} \times \frac{9}{2}$

Step 2

Look for common factors and simplify.

$\frac{11}{\cancel{3}_{1}} \times \frac{\overset{3}{\cancel{9}}}{2} = \frac{11}{1} \times \frac{3}{2}$

Step 3

Multiply. Write the product as a mixed number.

$\frac{11}{1} \times \frac{3}{2} = \frac{33}{2} = 16\frac{1}{2}$

$16\frac{1}{2}$ is close to 20, so the answer is reasonable.

Find each product. Simplify if possible.

1. $2\frac{3}{4} \times 3\frac{1}{2} =$ **$9\frac{5}{8}$**
2. $2\frac{1}{2} \times 2\frac{2}{3} =$ **$5\frac{13}{15}$**
3. $6 \times 3\frac{1}{4} =$ **$19\frac{1}{2}$**
4. $1\frac{2}{5} \times 3\frac{1}{4} =$ **$4\frac{20}{7}$**
5. $4\frac{1}{2} \times 16 =$ **72**
6. $1\frac{3}{8} \times 2\frac{1}{2} =$ **$3\frac{7}{16}$**

7. **Number Sense** Is $2 \times 17\frac{5}{6}$ greater than or less than 36? Explain.
   Less, because $2 \times 18 = 36$. $17\frac{5}{6}$ is less than 18, so the product is less than 36.

Reteaching

Name _____

Adding Mixed Numbers

R 4-5

To add mixed numbers, you can add the fractional parts to the whole number parts, and then simplify.

Find $2\frac{2}{4} + 3\frac{1}{4}$.

The fractions have a common denominator. Add the fractions. Then add the whole numbers.

$2\frac{2}{4}$

$+3\frac{1}{4}$

$5\frac{3}{4}$

Find $3\frac{2}{3} + 4\frac{1}{9}$.

Write equivalent fractions with the LCD.

$3\frac{2}{3} = 3\frac{6}{9}$

$+4\frac{1}{9} = 4\frac{1}{9}$

Add the whole numbers. Add the fractions. Simplify if possible.

$3\frac{6}{9}$

$+4\frac{1}{9}$

$7\frac{7}{9}$

Find $4 + 3\frac{3}{5}$.

Add the whole numbers; then add the fraction.

4

$+3\frac{3}{5}$

$7\frac{3}{5}$

Find each sum. Simplify your answer.

1. $2\frac{1}{5} + 2\frac{3}{5} =$ **$4\frac{4}{5}$**
2. $4\frac{2}{3} + 1\frac{1}{6} =$ **$5\frac{5}{6}$**
3. $5\frac{3}{5} + \frac{3}{10} =$ **$5\frac{9}{10}$**
4. $8\frac{5}{8} + 1\frac{5}{12} =$ **$10\frac{1}{24}$**
5. $6\frac{1}{4} + 11\frac{3}{8} =$ **$17\frac{5}{8}$**
6. $7 + 8\frac{1}{3} =$ **$15\frac{1}{3}$**

7. In 2001, the men's indoor pole vault record was $20\frac{1}{8}$ ft. The women's record for the indoor pole vault was $15\frac{5}{12}$ ft. What is the combined height of the two records?
   $35\frac{7}{12}$ ft

8. **Writing in Math** How high is a stack of library books if one book is $1\frac{3}{8}$ in. high, the second book is $1\frac{5}{8}$ in. high, and the third is $2\frac{1}{3}$ in. high? Explain how you solved this problem.
   $5\frac{13}{24}$ in.; You need to find the LCD to solve this problem.

23

Reteaching

Name _____

Area of Squares and Rectangles

R 10-8

You can use formulas to find the area of a square or rectangle.

Find the area of a square that is 7.2 m on each side.

Use the formula $A = s^2$.

$A = (7.2)^2$

$A = 51.84$

The area is 51.84 m^2.

Find the area of a rectangle with a length (l) of 4 cm and a width (w) of 12 cm.

Use the formula $A = l \times w$.

$A = 4 \times 12$

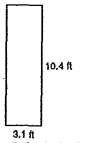
$A = 48$

The area is 48 cm^2.

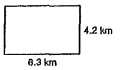
Find the area of each figure.

1. 

68.89 cm^2

2. 

32.24 ft^2

3. 

26.46 km^2

4. 

77.44 ft^2

5. **Reasoning** What is the length of a rectangle that has an area of 120 ft^2 and a width of 8 ft? 15 ft

6. **Number Sense** What is the area of a square that is 12.4 cm on each side? 153.76 cm^2

Reteaching

Name _____

Customary Measurement

R 10-1

Units of Length		Units of Capacity	
foot (ft)	1 ft = 12 in.	cup (c)	1 c = 8 fluid ounces (oz)
yard (yd)	1 yd = 3 ft	pint (pt)	1 pt = 2 c
	1 yd = 36 in.	quart (qt)	1 qt = 2 pt
mile (mi)	1 mi = 5,280 ft	gallon (gal)	1 gal = 4 qt
	1 mi = 1,760 yd		

How to change from one unit of measurement to another:

To change from larger units to smaller units in the customary system, you have to multiply.

120 yd = _____ ft

1 yd = 3 ft

120 × 3 ft = 360 ft

120 yd = 360 ft

To change from smaller units to larger ones, you have to divide.

256 oz = _____ c

1 c = 8 oz

256 ÷ 8 = 32

256 oz = 32 c

Complete.

1. 36 in. = 3 ft
2. 4 qt = 16 c
3. 5 lb = 80 oz
4. 39 ft = 13 yd
5. 1.5 mi = 7,920 ft
6. 3.5 gal = 14 qt
7. 2 T = 4,000 lb
8. 16 pt = 8 qt
9. 64 oz = 4 lb
10. 3 yd = 108 in.
11. 4 gal = 32 pt
12. 55 yd = 165 ft
13. 6.5 lb = 104 oz
14. 20 pt = 2.5 gal
15. 4.5 qt = 18 c
16. 205 yd = 615 ft

17. **Reasoning** A vendor at a festival sells soup for $1.25 per cup or $3.75 per quart. Which is the better buy?

$3.75 per quart is the better buy.

Reteaching

Name _____

Metric Measurement

R 10-2

Changing from one metric unit to another:

To change from a larger unit to a smaller unit, multiply by a power of ten.

3.8 L = _____ mL

A liter is a larger unit than a milliliter. To change from liters to milliliters, multiply.

1 L = 1,000 mL

3.8 × 1,000 = 3,800

3.8 L = 3,800 mL

To change from a smaller unit to a larger unit, divide by a power of ten.

100 m = _____ km

The meter is a smaller unit than the kilometer. To change from meters to kilometers, divide.

1,000 m = 1 km

100 ÷ 1000 = 0.1

100 m = 0.1 km

Name the most appropriate metric unit for each measurement.

1. mass of a cow: kg
2. length of a carrot: cm
3. capacity of a thimble: mL

Complete.

4. 45 g = 45,000 mg
5. 3450 mL = 3.45 L
6. 4.5 m = 4,500 mm
7. 1.68 L = 1,680 mL
8. 28 cm = 280 mm
9. 7,658 g = 7.658 kg
10. 600 cm = 6 m
11. 5,000 mg = 5 g
12. 5.1 km = 5,100 m
13. 1.780 L = 1,780 mL
14. 0.780 L = 780 mL
15. 4,300 m = 4.3 km
16. 9,000 cm = 90 m
17. 8,000 mg = 8 g

18. **Reasoning** It is recommended that people have 1 g of calcium each day. How many milligrams of calcium is that?

1,000 mg

Reteaching

Name _____

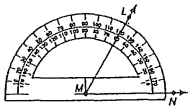
Measuring and Drawing Angles

R 9-2

How to measure an angle:

Step 1 Place the protractor's center on the angle's vertex.

Step 2 Place the 0° mark on one side of the angle.



$\angle LMN = 60°$

Step 3 Use the scale beginning with the 0° mark to read the measurement where the other side of the angle crosses the protractor.

How to draw an angle:

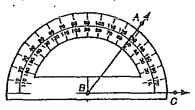
Draw an angle of 52°.

Step 1 Draw a ray.

Step 2 Place the protractor's center on the endpoint. Line up the ray with the 0° mark.

Step 3 Using the scale with the 0° mark, place a point at 52°.

Step 4 Draw the other ray.

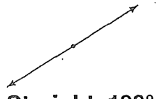


$\angle ABC = 52°$

Classify each angle as acute, right, obtuse, or straight. Then measure the angle.

1. 

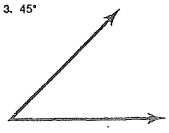
Acute; 50°

2. 

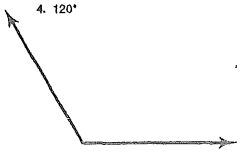
Straight; 180°

Draw an angle with each measure.

3. 45°



4. 120°



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Reteaching

Name _____

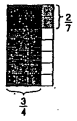
Multiplying Fractions

R 5-2

Find $\frac{3}{4} \times \frac{2}{7}$.

One Way

Draw a picture. Simplify if possible.



6 of the 28 squares have overlapping shading.

So, $\frac{3}{4} \times \frac{2}{7} = \frac{6}{28}$.

Simplify $\frac{6}{28}$ to $\frac{3}{14}$.

Another Way

Multiply the numerators and denominators. Simplify if possible.

$\frac{3}{4} \times \frac{2}{7}$

$= \frac{3 \times 2}{4 \times 7} = \frac{6}{28}$

$= \frac{3}{14}$

Simplify First

Find the GCF of any numerator and any denominator.

The GCF of 2 and 4 is 2. Divide 2 and 4 by the GCF.

$\frac{3}{\cancel{4}_{2}} \times \frac{\cancel{2}^{1}}{7} = \frac{3}{14}$

Write an equation for each picture.

1. 

$\frac{1}{3} \times \frac{1}{2} = \frac{1}{6}$

2. 

$\frac{1}{6} \times \frac{1}{3} = \frac{1}{18}$

Find each product. Simplify if possible.

3. $\frac{6}{8} \times \frac{1}{3} = \frac{1}{4}$

4. $\frac{5}{6} \times \frac{7}{10} = \frac{7}{12}$

5. $\frac{4}{5} \times \frac{3}{8} = \frac{3}{10}$

6. $\frac{1}{2} \times \frac{4}{9} = \frac{2}{9}$

7. **Number Sense** Can you simplify before multiplying $14 \times \frac{25}{27}$? Explain.

No, because there is no common factor to divide by

20