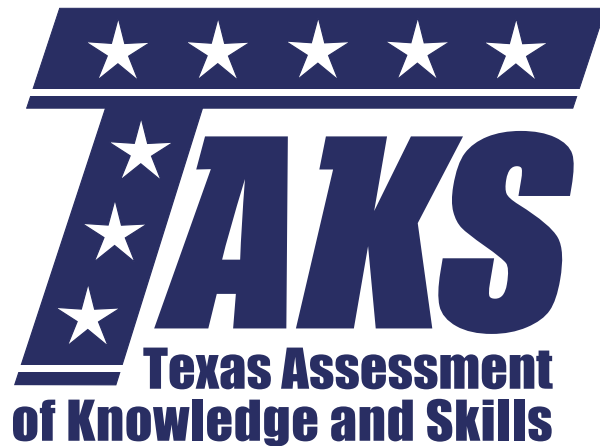


STUDENT NAME \_\_\_\_\_



**GRADE 4  
WRITING  
MATHEMATICS  
READING**

**Administered Spring 2003**

# MATHEMATICS

# Mathematics Chart

## LENGTH

### Metric

1 kilometer = 1000 meters

1 meter = 100 centimeters

1 centimeter = 10 millimeters

### Customary

1 mile = 1760 yards

1 mile = 5280 feet

1 yard = 3 feet

1 foot = 12 inches

## CAPACITY AND VOLUME

### Metric

1 liter = 1000 milliliters

### Customary

1 gallon = 4 quarts

1 gallon = 128 ounces

1 quart = 2 pints

1 pint = 2 cups

1 cup = 8 ounces

## MASS AND WEIGHT

### Metric

1 kilogram = 1000 grams

1 gram = 1000 milligrams

### Customary

1 ton = 2000 pounds

1 pound = 16 ounces

## TIME

1 year = 365 days

1 year = 12 months

1 year = 52 weeks

1 week = 7 days

1 day = 24 hours

1 hour = 60 minutes

1 minute = 60 seconds

Metric and customary rulers can be found on the separate Mathematics Chart.

Continued on the next page

## Mathematics Chart

<b>Perimeter</b>	square	$P = 4s$
	rectangle	$P = 2l + 2w$ or $P = 2(l + w)$
<b>Area</b>	rectangle	$A = lw$ or $A = bh$

**DIRECTIONS**

**Read each question. Then fill in the correct answer on your answer document. If a correct answer is not here, mark the letter for “Not Here.”**

**SAMPLE A**

Which digit is in the thousands place in the number 4,861,392?

- A** 6
- B** 4
- C** 1
- D** Not Here

**SAMPLE B**

Joey has 8 books. Roberto has twice as many books as Joey has. How many books does Roberto have?

Record your answer and fill in the bubbles on your answer document. Be sure to use the correct place value.

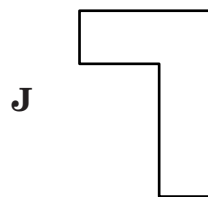
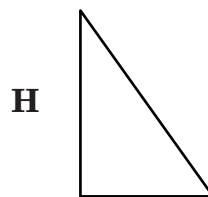
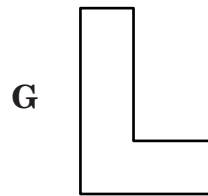
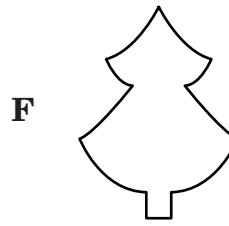


- 1 Which number is missing from the number sentence?

$$63 \div \square = 7$$

- A 6
- B 7
- C 8
- D 9

- 2 Which drawing best represents a figure with one line of symmetry?



- 3 Which is the best estimate of the weight of a car?

- A 200 ounces
- B 2,000 grams
- C 200 milligrams
- D 2,000 pounds

4 Hal made this graph to show the number of hours that he worked for four weeks.



If Hal earned \$6 an hour, how much money did he earn during Week 2?

**F** \$12

**G** \$24

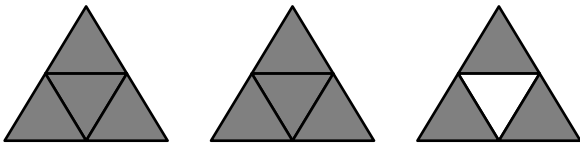
**H** \$30

**J** \$42

5 Austin's mother bought 8 cases of soda for a party. There were 24 cans in each case. How many cans of soda did Austin's mother buy altogether?

- A 192
- B 184
- C 172
- D 132

6 The model is shaded to show which fraction?



- F  $2\frac{1}{3}$
- G  $2\frac{2}{3}$
- H  $2\frac{3}{4}$
- J  $3\frac{1}{3}$

7 Ryan went to the movies. He bought a movie ticket for \$3.50, a soda for \$2, and 2 boxes of popcorn. What information is needed to find the total amount Ryan spent at the movies?

- A The number of people at the movie
- B The cost of a candy bar
- C The title of the movie
- D The cost of a box of popcorn

8 There were 30 cookies on a platter for 9 children. If each child ate the same number of whole cookies, how many whole cookies did each child eat?

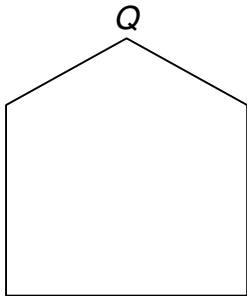
F 3

G 4

H 5

J 9

9 Which type of angle best describes angle  $Q$ ?



A Obtuse

B Acute

C Right

D Not Here

10 Each day that Jasmine turns in her homework on time, she earns 5 points. Jasmine has turned in her homework on time for the last 8 days. How many points has Jasmine earned altogether?

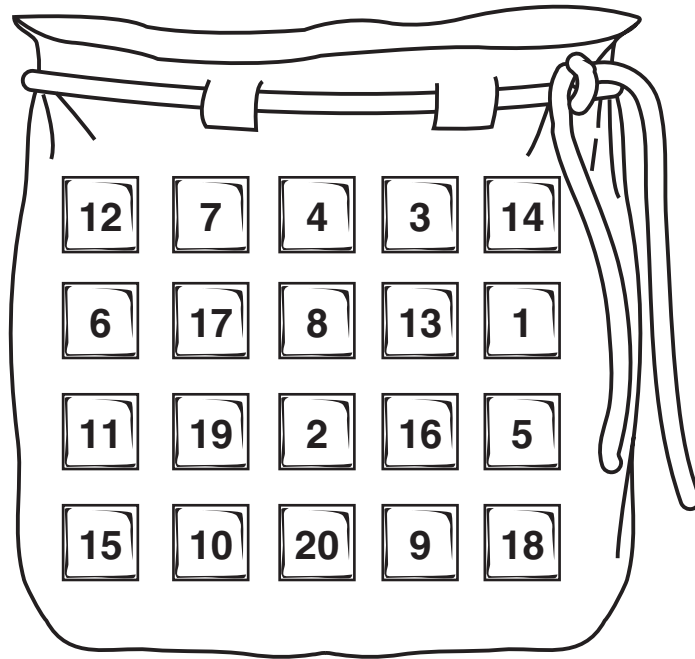
F 30

G 35

H 40

J 45

- 11 Jill has a bag with 20 tiles numbered 1 to 20. If she picks out 1 tile without looking, what is the probability that the number on the tile will be an even number?



- A 1 out of 10  
B 1 out of 20  
C 10 out of 10  
D 10 out of 20

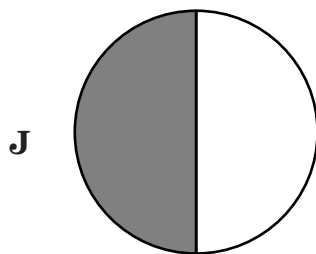
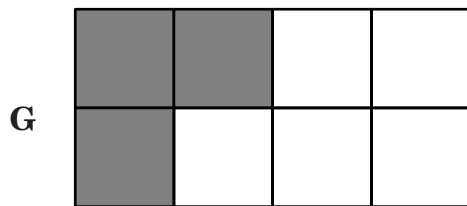
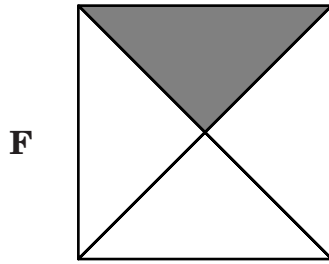
- 12 Eli put a toy car and a toy truck on a scale. Together they weighed about 1 pound. If the toy truck weighs about 10 ounces, about how much does the toy car weigh?

- F 6 ounces  
G 10 ounces  
H 16 ounces  
J 26 ounces

- 13 Theo bought 2 books for \$4 each and 3 pencils for \$1 each. Which number sentence can be used to find the total amount of money in dollars Theo spent?

- A  $8 \times 4 = \square$   
B  $8 + 3 = \square$   
C  $6 + 4 = \square$   
D  $6 \times 3 = \square$

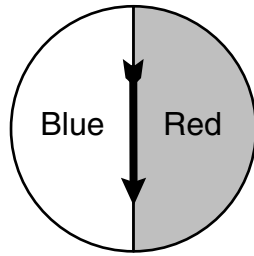
- 14 Which model is shaded to show a fraction equivalent to  $\frac{3}{6}$ ?



- 15 At breakfast the temperature outside was  $68^{\circ}\text{F}$ . At lunchtime it had gone up  $5^{\circ}\text{F}$ , and then by dinnertime it had gone down  $2^{\circ}\text{F}$ . What was the temperature at dinnertime?

- A  $61^{\circ}\text{F}$
- B  $65^{\circ}\text{F}$
- C  $71^{\circ}\text{F}$
- D  $73^{\circ}\text{F}$

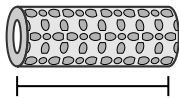
16 Look at the spinner.



If a student spins the spinner twice, what are all the possible outcomes?

- F 2 blues or 2 reds or 1 blue and 1 red
- G 2 blues or 2 reds
- H 2 reds or 1 blue and 1 red
- J 2 blues or 1 blue and 1 red

17 Jenny is making a necklace with beads like the one shown below. Use the ruler on the Mathematics Chart to measure the line segment under the bead in centimeters.



About how long is the necklace if Jenny uses 27 beads?

- A 25 cm
- B 29 cm
- C 44 cm
- D 54 cm

18 Each number in Set P is paired with a number in Set Q. The relationship for each pair of numbers is the same.

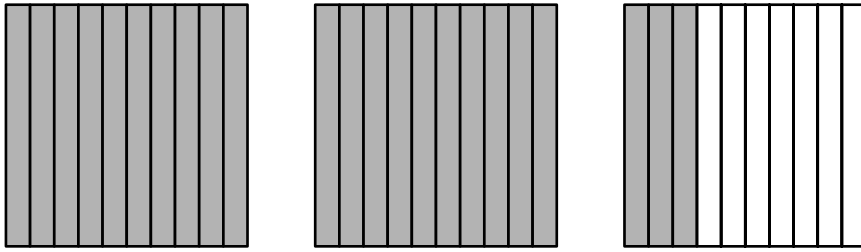
Set P	Set Q
1	7
4	10
8	14

If the number in Set P is 11, how will you find its paired number in Set Q?

- F Add 6 to 11
- G Multiply 11 by 6
- H Add 6 to 14
- J Multiply 11 by 3

- 19 George scored 7 points during a basketball game. Jack scored 3 times as many points as George. Which of these shows the total number of points that Jack scored?
- A The sum of 7 and 3
  - B The difference between 21 and 3
  - C The product of 7 and 3
  - D The quotient of 21 and 3

- 20 The model is shaded to represent  $2\frac{3}{10}$ .



Which decimal does the model represent?

- F** 0.23  
**G** 2.03  
**H** 2.3  
**J** 20.3
- 
- 21 Mr. and Mrs. Gómez ride bikes to exercise. The table shows the total number of miles they had ridden after different numbers of days.

Number of Days	Total Number of Miles
1	10
9	90
15	150

If the pattern continues, how many miles will Mr. and Mrs. Gómez have ridden after 28 days?

Record your answer and fill in the bubbles on your answer document. Be sure to use the correct place value.

**22** Which is the best estimate of the capacity of a coffee cup?

- F** 250 liters
- G** 250 gallons
- H** 250 milliliters
- J** 250 cups

**24** There were 1,455,268 people living in Weston in 1990. In the year 2000 there were 1,426,599 people. How many more people were living in Weston in 1990 than in 2000?

- F** 27,569
- G** 28,669
- H** 28,671
- J** 31,331

**23** Which pair of numbers best completes the equation?

$$\square \times 100 = \bigcirc$$

- A**  $\square$  65 and  $\bigcirc$  650
- B**  $\square$  65 and  $\bigcirc$  6,500
- C**  $\square$  605 and  $\bigcirc$  6,500
- D**  $\square$  650 and  $\bigcirc$  6,005

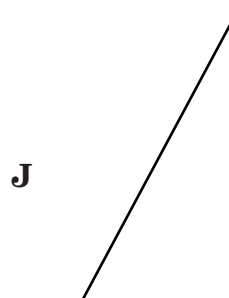
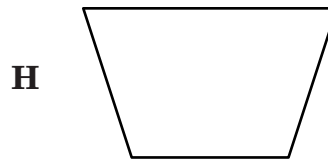
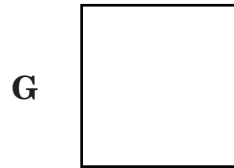
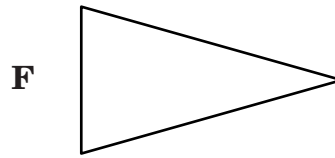
- 25 Each number in Set S is related in the same way to the number below it in Set T.

Set S	1	3	5
Set T	6	18	30

If the number in Set S is 9, what is one way to find its related number in Set T?

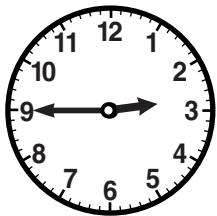
- A Multiply 5 by 6
- B Add 9 and 6
- C Multiply 9 by 6
- D Add 5 and 6

- 26 Which drawing best represents a figure that has only one pair of parallel lines?

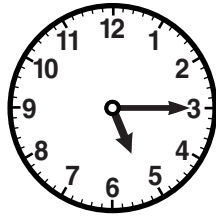


- 27 For a school project, Eric's class is recording all the cities in Texas that have more than 15 inches of rainfall each year and how much rain each of these cities gets. Which would be the best way for the class to organize this information?
- A Draw a picture of the state with these cities circled
  - B Make a graph showing the population of the 10 largest cities
  - C List all the cities in Texas in alphabetical order
  - D Make a table to list the cities and their rainfall amounts

28 Look at the clocks.



Start



End

Mark baby-sits from 2:45 P.M. to 5:15 P.M. each day. How long does he baby-sit each day?

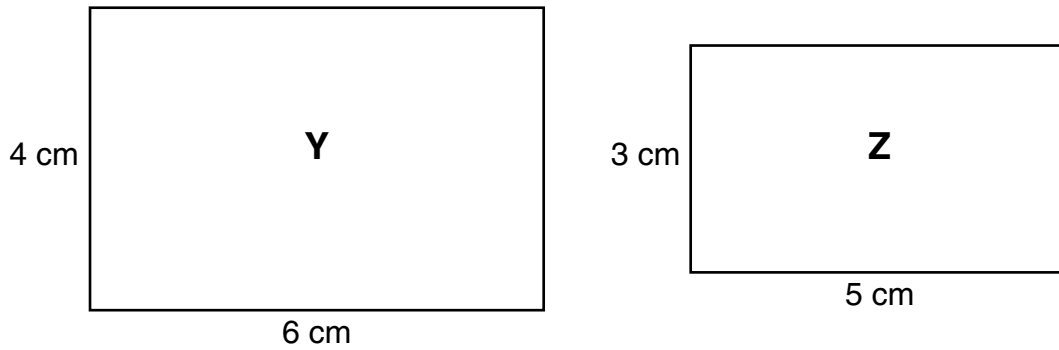
- F 30 minutes
- G 2 hours 30 minutes
- H 3 hours
- J 3 hours 30 minutes

29 Dave washes the dishes every other day. If he washes the dishes on August 3, on which of the following days will he **NOT** have to wash the dishes?

August						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

- A August 15
- B August 21
- C August 25
- D August 30

30 Look at the rectangles below.



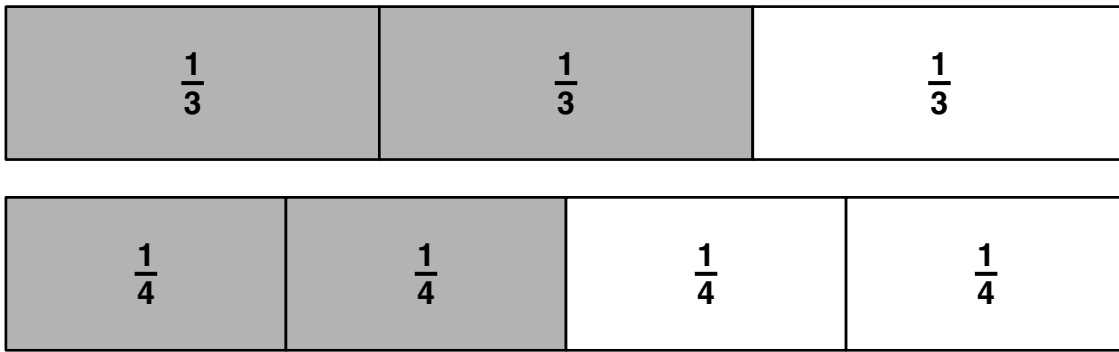
The perimeter of rectangle Y is how many centimeters greater than the perimeter of rectangle Z?

- F 1 cm
- G 2 cm
- H 3 cm
- J 4 cm

31 Zachary has a ball of string 6 yards long. He needs 20 feet of string for a project. What should Zachary do first to find out if he has enough string to equal 20 feet?

- A Multiply 20 by 3
- B Multiply 20 by 6
- C Multiply 6 by 3
- D Multiply 6 by 12

32 The models are shaded to show that —



**F**  $\frac{1}{3} = \frac{2}{4}$

**G**  $\frac{1}{4} > \frac{1}{3}$

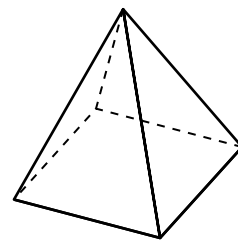
**H**  $\frac{2}{3} < \frac{2}{4}$

**J**  $\frac{2}{4} < \frac{2}{3}$

33 Alex bought lemons that were priced at 2 lemons for 18¢. What was the total cost of 5 lemons?

- A 28¢
- B 36¢
- C 45¢
- D 90¢

34 How many edges does this square pyramid have?



- F 12
- G 8
- H 6
- J 4

**35** Danny's dog ate 56 cans of food in 4 weeks. If the dog eats the same amount each week, which number sentence can be used to find the number of cans of food the dog eats in one week?

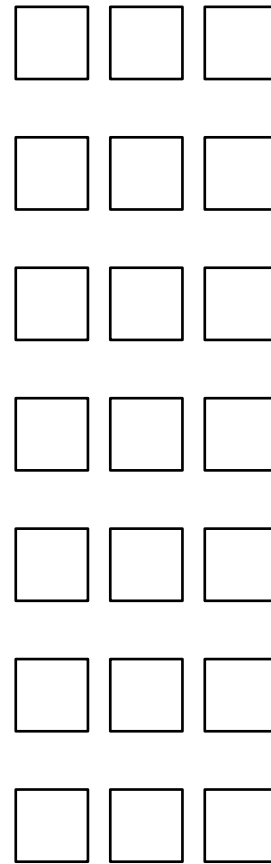
**A**  $56 \times 7 = \square$

**B**  $56 \div 7 = \square$

**C**  $56 \times 4 = \square$

**D**  $56 \div 4 = \square$

**36** Avery arranged some tiles in the pattern shown below.



Which number sentence best represents Avery's arrangement of tiles?

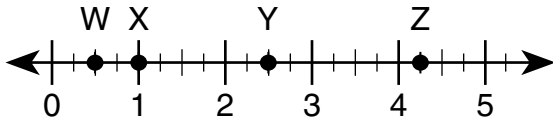
**F**  $7 + 3 = 10$

**G**  $7 \times 3 = 21$

**H**  $7 \times 7 = 49$

**J**  $21 - 3 = 18$

- 37 Which point on the number line best represents  $\frac{1}{2}$ ?



- A W
- B X
- C Y
- D Z

- 38 The table below shows the number of months in different numbers of years.

Months in Years

Number of Years	1	2	3
Number of Months	12	24	36

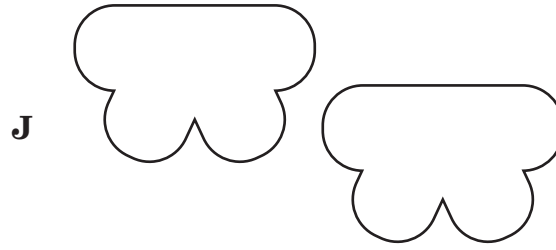
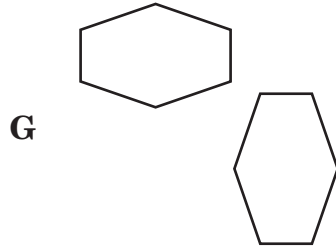
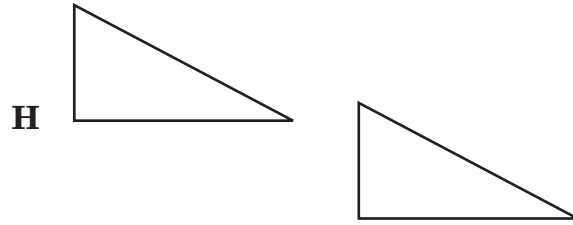
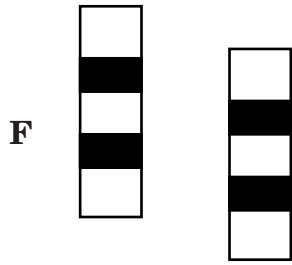
What is one way to find the number of months in 7 years?

- F Multiply 7 by 12
- G Add 12 to 7
- H Subtract 7 from 12
- J Divide 12 by 7

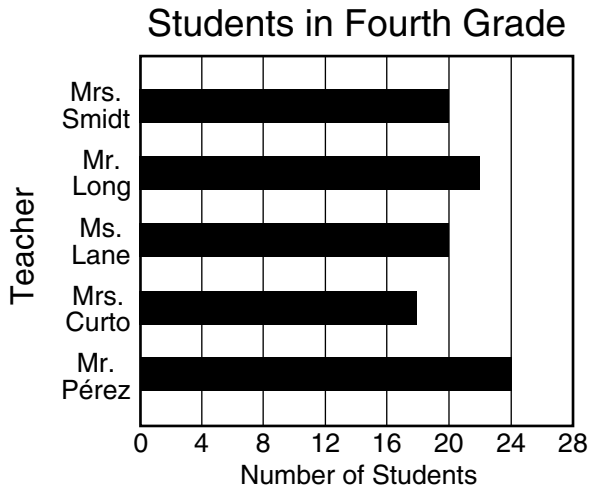
- 39 In which number sentence does 4 make the equation true?

- A  $40 \div \square = 8$
- B  $24 \div \square = 8$
- C  $16 \div \square = 8$
- D  $32 \div \square = 8$

40 Which pair of figures does **NOT** show a translation?



- 41 The graph shows the number of students in each fourth-grade class at Lake View Elementary.



Which 2 teachers have a combined total of 46 students?

- A Mr. Long and Mr. Pérez
- B Mrs. Smidt and Mrs. Curto
- C Mr. Pérez and Mrs. Curto
- D Mrs. Smidt and Ms. Lane

- 42 There were 3,126 people at the fair on Saturday and 3,759 people on Sunday. Which is the best estimate of the total number of people at the fair on both days?

- F 1,000
- G 6,000
- H 7,000
- J 8,000

BE SURE YOU HAVE RECORDED ALL OF YOUR ANSWERS  
ON THE ANSWER DOCUMENT.

