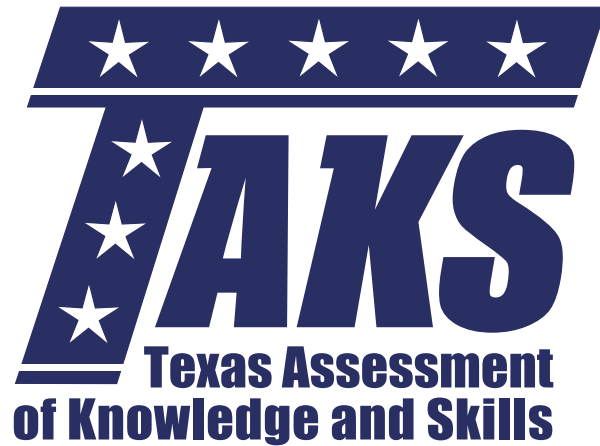


STUDENT NAME _____



**GRADE 4
WRITING
MATHEMATICS
READING**

Administered Spring 2004

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

Perimeter	square	$P = 4s$
	rectangle	$P = 2l + 2w$ or $P = 2(l + w)$
Area	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?

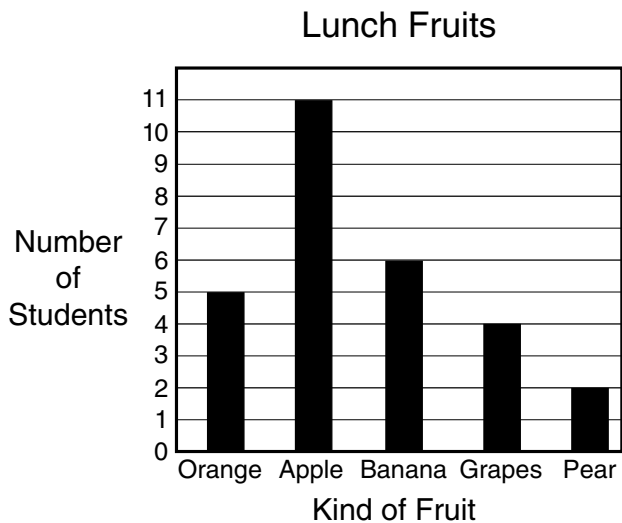
Record your answer and fill in the bubbles on your answer document. Be sure to use the correct place value.



1 In which number sentence does 12 make the equation true?

- A $132 \div \square = 11$
- B $115 \div \square = 5$
- C $100 \div \square = 4$
- D $120 \div \square = 12$

2 The graph shows how many students ate each kind of fruit with their lunch on Monday.



How many more students ate apples than ate grapes?

- F 9
- G 15
- H 8
- J 7

3 Which of these polygons has more than four sides?

- A Trapezoid
- B Octagon
- C Parallelogram
- D Rectangle

4 Xavier buys postcards by the box. The table shows how many postcards there are in 3, 5, and 8 boxes.

Number of Boxes	Number of Postcards
3	120
5	200
8	320
9	

Based on the pattern in the table, what should Xavier do to find the number of postcards in 9 boxes?

- F Multiply 9 by 40
- G Add 9 to 40
- H Divide 40 by 9
- J Subtract 9 from 40

5 Which number sentence is in the same fact family as $42 \div 7 = \square$?

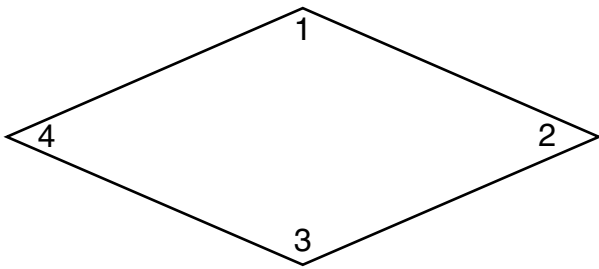
A $7 + \square = 42$

B $\square - 7 = 42$

C $7 \times \square = 42$

D $42 \times 7 = \square$

6 In the figure below, which two angles appear to be obtuse?



F Angles 1 and 2

G Angles 1 and 3

H Angles 1 and 4

J Angles 2 and 4

7 The table below shows the number of pennies collected by three children for a contest.

Pennies Collected

Child	Number of Pennies
Katie	49
Tracie	83
Fillipe	59

Which is the best estimate of the number of pennies collected by the three children altogether?

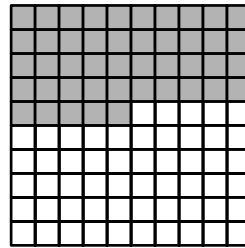
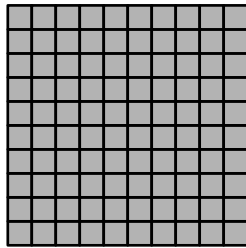
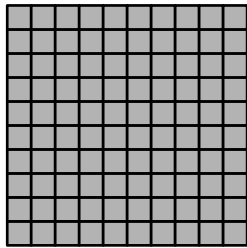
A 200

B 190

C 180

D 170

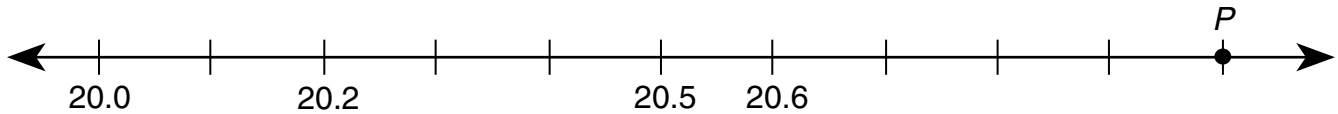
- 8 The model is shaded to represent $2\frac{45}{100}$.



What decimal does the model represent?

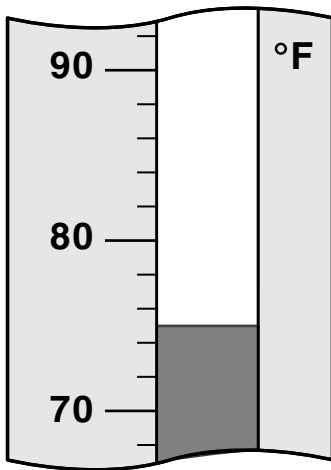
- F** 245.0
- G** 0.245
- H** 2.45
- J** 24.5
-
- 9** Meg and Annie made 48 cupcakes for a party. They decorated each cupcake with 10 chocolate chips. How many chocolate chips did they use to decorate all 48 cupcakes?
- A** 5,000
- B** 4,800
- C** 500
- D** 480
- 10** In Darrin's class there were 3 boys wearing shorts and 7 boys wearing jeans. If Darrin picked 1 boy from the class to be his project partner, what are the chances the boy was wearing shorts?
- F** 3 out of 7
- G** 3 out of 10
- H** 4 out of 7
- J** 4 out of 10

11 Which number is best represented by point P on the number line?



- A 21.1
- B 20.9
- C 21.0
- D 20.8

12 The thermometer below shows the high temperature for one day in March.



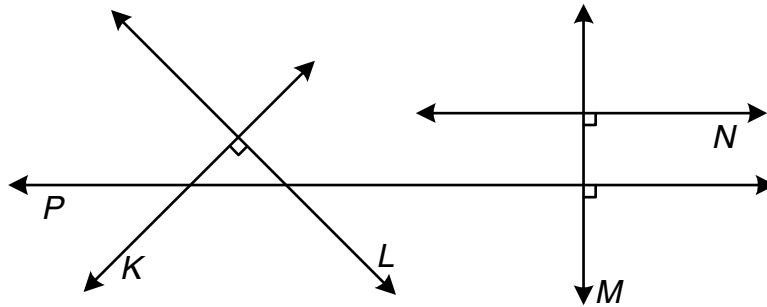
The low temperature for that day was 17°F lower. What was the low temperature?

- F 58°F
- G 68°F
- H 82°F
- J 92°F

13 Every day Khari and her family have 2 newspapers delivered to their house. When they came back from a trip, there were 14 newspapers waiting for them. Which number sentence can be used to find the number of days they were gone?

- A $14 \div 2 = \square$
- B $14 + 2 = \square$
- C $14 - 2 = \square$
- D $14 \times 2 = \square$

14 Which line is perpendicular to line P ?



- F Line K
- G Line L
- H Line M
- J Line N

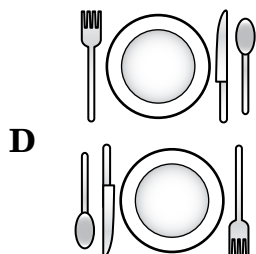
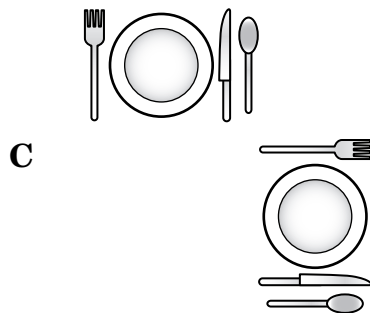
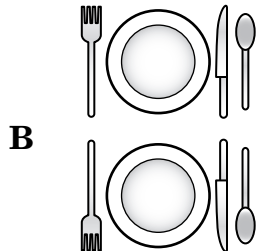
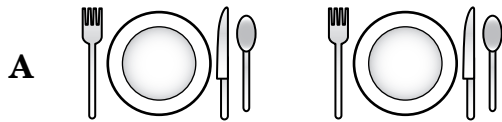
15 It takes Olivia between 7 and 9 minutes to walk to school each day. At this rate, about how many days will it take Olivia to spend 60 minutes walking to school?

- A 3 days
- B 5 days
- C 7 days
- D 12 days

16 There are 24 hours in a day and 365 days in a year. Which is the best estimate of the number of hours in a year?

- F 12,000 h
- G 8,000 h
- H 390 h
- J 380 h

17 Danielle created a reflection with two place settings. Which could be the place settings she used?



18 When Maggie went to her sister's graduation, she saw that 300 students were graduating. Maggie noticed that equal numbers of graduating students were seated in 5 different sections of the auditorium. How many graduating students were seated in 1 section?

F 60

G 600

H 295

J 1,500

19 Hal used this table to find the total prices of different numbers of tickets to a basketball game.

Number of Tickets	5	10	15	20	25
Price of Tickets	\$15	\$30	\$45	\$60	\$75

Based on the information in the table, how would Hal find the price of 1 ticket?

A Multiply the number of tickets by 5

B Add 3 to the number of tickets

C Subtract the number of tickets from the price of tickets

D Divide the price of tickets by the number of tickets

- 20 Arturo and his father are planning a camping trip. The advertisement for a beach camp is shown below.



If Arturo and his father have \$50.00 to spend on a campsite, how many nights will they be able to camp on the beach?

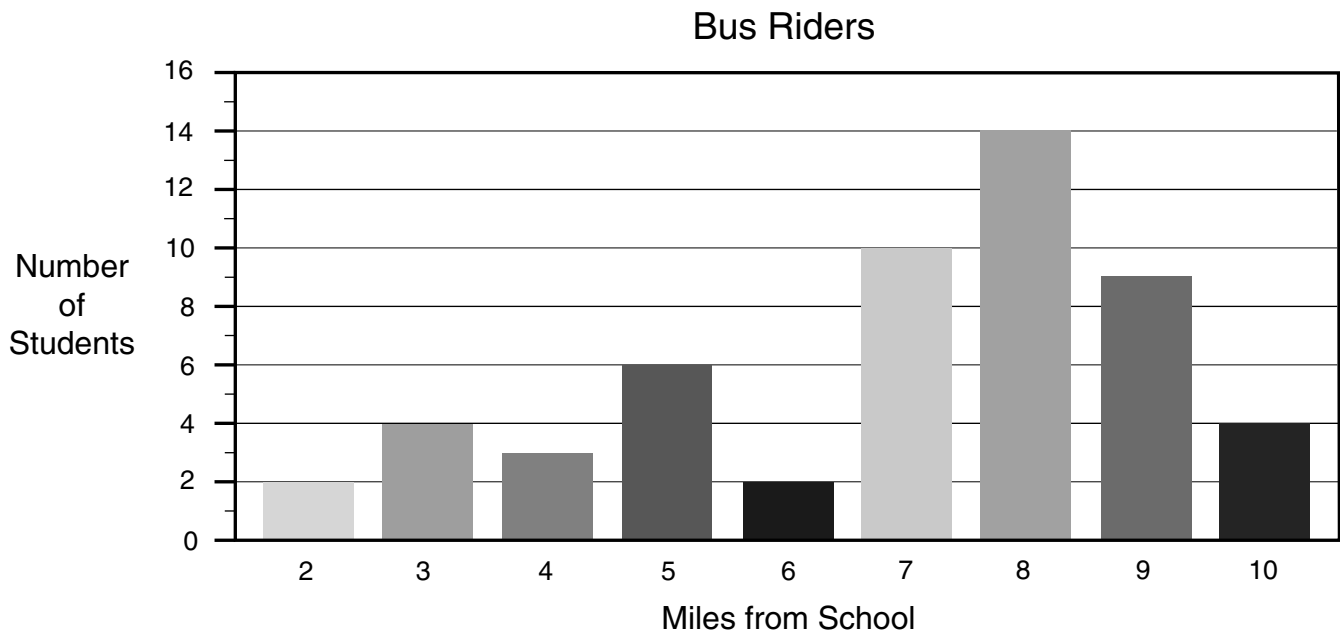
- F 3
- G 4
- H 5
- J 6

- 21 What number makes this equation true?

$$110 \div \square = 11$$

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

- 22** A school bus picks up 54 students each day. The distance each student lives from school is shown on the graph below.



How many students live 9 or more miles from school?

- F** 4
- G** 9
- H** 13
- J** 14

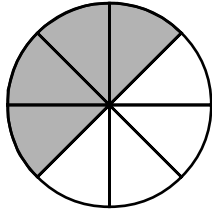
-
- 23** Billy Ray began riding horses at 7:30 A.M. He rode for 3 hours 45 minutes. What time did Billy Ray finish riding horses?

- A** 4:15 A.M.
- B** 10:15 A.M.
- C** 11:15 A.M.
- D** 11:45 A.M.

24 Which of the following is another way to write the numeral 5,010,705?

- F Five million, one thousand, seven hundred five
- G Five million, ten thousand, seven hundred five
- H Five million, one hundred thousand, seven hundred five
- J Five hundred ten thousand, seven hundred five

25 Which fraction is **NOT** equivalent to the shaded area of the circle?

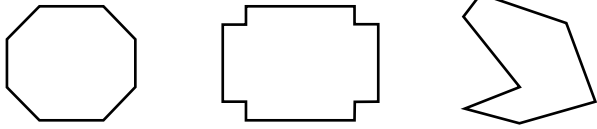


- A $\frac{3}{4}$
- B $\frac{4}{8}$
- C $\frac{2}{4}$
- D $\frac{1}{2}$

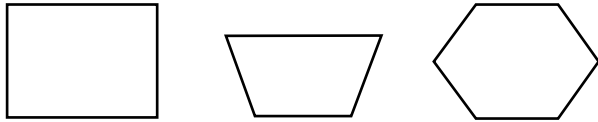
26 At a doughnut shop doughnuts are sold for \$4.39 a dozen. Mrs. Roark needs 48 doughnuts for her party. What question needs to be answered in order to find the amount Mrs. Roark will pay for the doughnuts?

- F How much do 12 doughnuts cost?
- G How many people will be at the party?
- H How many people don't like doughnuts?
- J How many dozen doughnuts does Mrs. Roark need?

27 Carl drew these shapes.



Carmella drew these shapes.



What is a good description of the shapes Carl drew?

- A A closed figure with square edges
- B A closed figure with 8 or more sides
- C A closed figure with 7 or more sides
- D A closed figure with parallel sides

28 Which of these units would best measure the mass of a hummingbird?

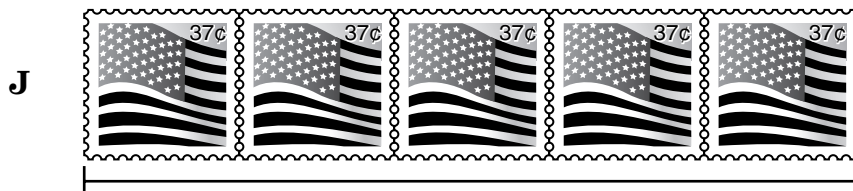
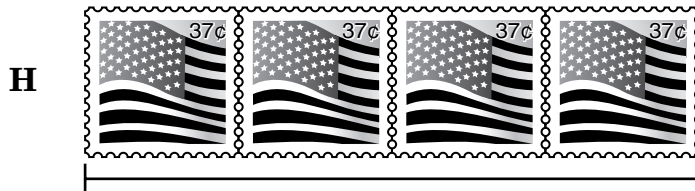
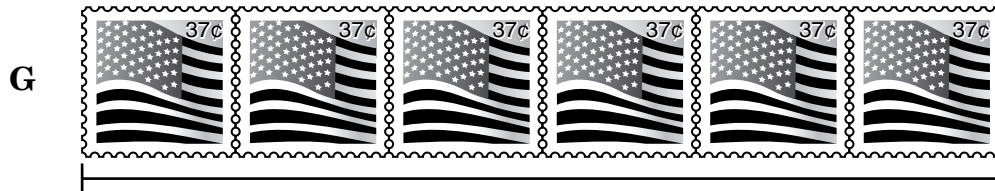
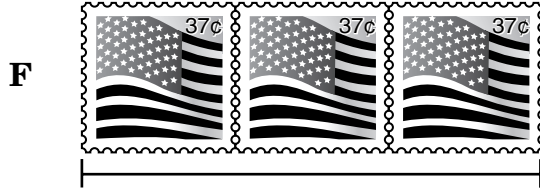
- F Kilograms
- G Millimeters
- H Grams
- J Centimeters

29 Which pair of numbers best completes the equation?

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

- A 95 and 950
- B 95 and 9,500
- C 95 and 95,000
- D 95 and 950,000

- 30 Olga has a 4-inch space on her envelope to place stamps. Use the ruler on the Mathematics Chart to measure the line segment in inches under each set of stamps below. Which set of stamps would fit exactly in the 4-inch space on Olga's envelope?



31 While riding in a car, Doreen counted 13 blue cars on the highway in 1 minute. At this rate, about how many blue cars will she see in 5 minutes?

- A** 125
- B** 50
- C** 20
- D** 135

32 A store had a sale on camping equipment. The sale prices, including tax, are shown in the table below.

Camping Equipment

Item	Price
Tent	\$149.75
Fishing pole	\$39.95
Backpack	\$189.79
Cooking gear	\$49.39
Sleeping bag	\$75.79
Camp stove	\$65.50
Lantern	\$29.95

Sandy and her father had \$225.00. They bought the cooking gear, a sleeping bag, and a camp stove. They had enough money left for one more item. What item could they buy?

- F** A lantern
- G** A tent
- H** A fishing pole
- J** A backpack

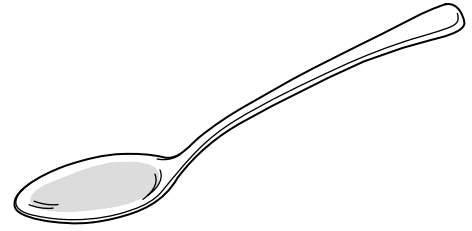
33 Which of the following describes the rule for this pattern?

15, 18, 17, 20, 19, 22, 21

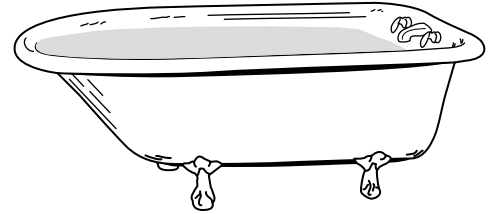
- A** Add 3, add 1
- B** Add 3, subtract 1
- C** Add 1, subtract 3
- D** Subtract 3, add 1

34 Which of the following holds about 1 liter of water?

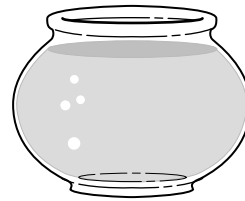
F



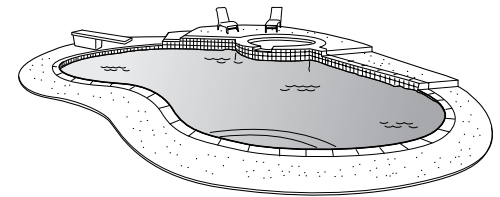
G



H



J



35 Luis has 4 paint sets. There are 12 jars of paint in each set. Which number sentence can be used to find the total number of jars of paint Luis has?

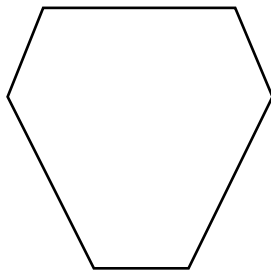
A $12 \times 4 = \square$

B $12 \div 4 = \square$

C $12 + 4 = \square$

D $12 - 4 = \square$

36 How many lines of symmetry does this shape have?



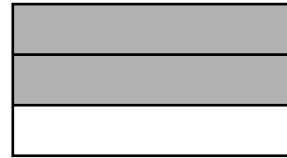
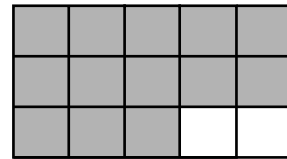
F 0

G 1

H 2

J 4

37 The models are shaded to show that —



A $\frac{2}{13} > \frac{1}{3}$

B $\frac{2}{3} > \frac{13}{15}$

C $\frac{1}{3} = \frac{2}{13}$

D $\frac{13}{15} > \frac{2}{3}$

38 Mika bought a dozen cupcakes from the bakery. How can she find the cost of 1 cupcake?

F Multiply the cost of a dozen by 12

G Add the cost of a dozen 12 times

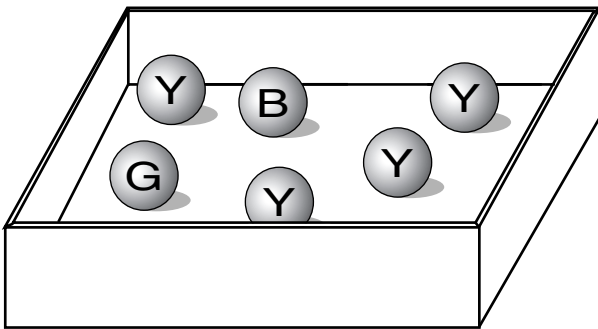
H Divide the cost of a dozen by 12

J Subtract the cost of a dozen from 12

- 39** Jerome's rectangular blanket is 4 feet long and 3 feet wide. What is the area of his blanket?
- A** 6 square feet
 - B** 7 square feet
 - C** 12 square feet
 - D** 14 square feet

- 41** Justin has 11 pets on his farm. He fed each pet 12 times last week. How many times in all did he feed his pets last week?
- A** 23
 - B** 121
 - C** 132
 - D** 144

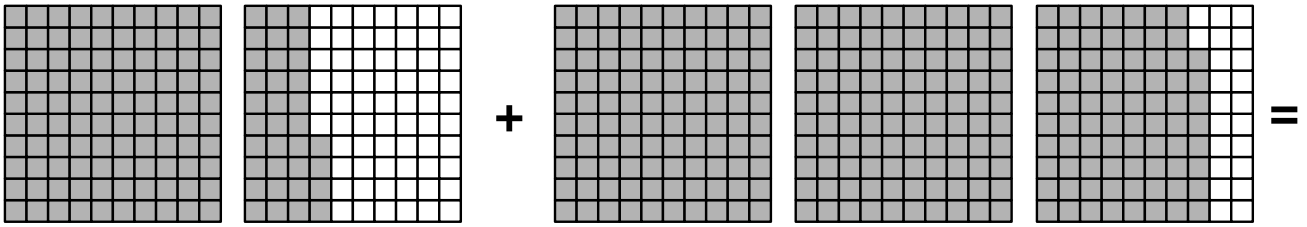
- 40** Look at the box of marbles.



If a student picks 1 marble without looking, what is the probability that it will have a Y on it?

- F** 1 out of 5
- G** 2 out of 4
- H** 2 out of 6
- J** 4 out of 6

42 At the school store Rochelle bought a package of pens for \$1.34 and a set of map pencils for \$2.78. What was the total amount she paid for school supplies?



F \$1.44

G \$3.02

H \$4.02

J \$4.12

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

