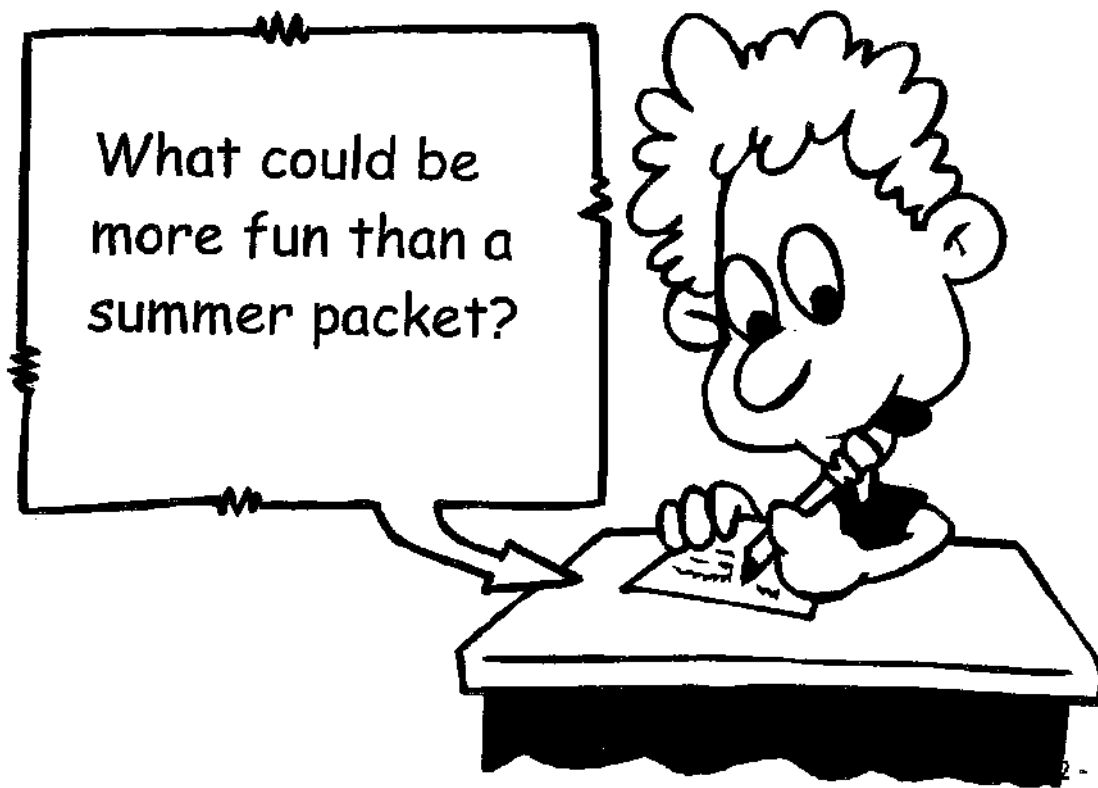This Summer Math Packet is for all students who will be entering 4th grade in the fall of 2013.

Please Note: This packet contains two sections. The first section is a review of grade 3 concepts. The second section is readiness for grade 4.

This packet should be completed prior to the start of school and will be collected during the first week of school.
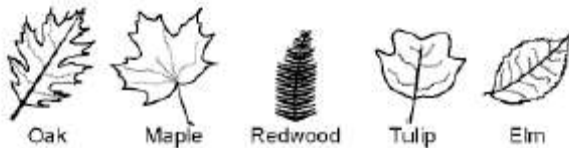
How many different ways can you make 16 cents using dimes, nickels, or pennies?

    A   3
    B   6
    C   8
    D   9

Round 79 to the nearest ten.

    A   70
    B   75
    C   80
    D   90

Elsa's class is studying different kinds of trees. They need 1,000 leaves for a project. They collected 497 leaves last week and 409 leaves this week. What is the best estimate for the number of leaves they have collected so far?

Oak   Maple   Redwood   Tulip   Elm

    A   700
    B   900
    C   950
    D   1,000

Estimate. Which two numbers have a difference of about 400?

    A   741 and 395
    B   523 and 204
    C   516 and 112
    D   611 and 285

It takes Kathy 39 minutes to walk to her grandmother's house. If she has been walking for 27 minutes, how many minutes does she have left to walk? Check that your answer is reasonable.

    A   66 minutes
    B   22 minutes
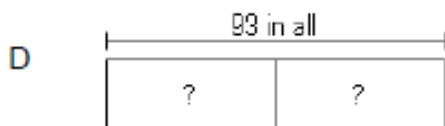   C   12 minutes
    D   2 minutes
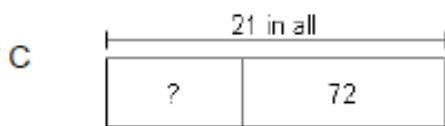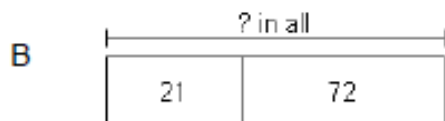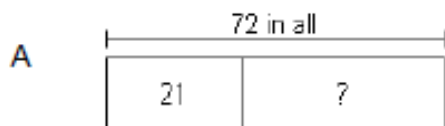
The public library checked out 187 books on Monday and 389 books on Tuesday. How many books were checked out in all?

    A   476 books
    B   566 books
    C   576 books
    D   586 books

The Jordan River is 200 miles long. The Tiber River is 252 miles long. How much longer is the Tiber River than the Jordan River?

    A   452 miles
    B   62 miles
    C   52 miles
    D   42 miles

A box contains 72 magazines and 21 books. Which diagram shows how many items are in the box altogether?

A
| 72 in all |
| 21 | ? |

B
| ? in all |
| 21 | 72 |

C
| 21 in all |
| ? | 72 |

D
| 93 in all |
| ? | ? |

A pet supply store has 600 bags of dog food and 327 bags of cat food. How many more bags of dog food are there than cat food?

A   327
B   283
C   273
D   263

Which has the same value as 7 + 7 + 7?

A   7 x 7
B   10 + 7
C   2 x 7
D   3 x 7

Which picture represents the problem?

Last year, the Carter family rented videos of 17 action movies and 26 comedies. How many more comedies than action movies did the family rent last year?

A
26	
17	?

B
26
17

C
17	
26	?

D
?	
26	17

There are 3 rows of pencils. Each row has 9 pencils. How many pencils in all?

A　12 pencils
B　18 pencils
C　27 pencils
D　30 pencils

Neal has 37 red blocks, 18 blue blocks, and 23 green blocks. How many blocks does he have in all?

  A   78
  B   68
  C   60
  D   51

Which problem could you write for 5 x 8?

  A   Harry had 4 pencils and a friend gave him 6 more. How many pencils does Harry have now?
  B   Harry bought 5 boxes of pencils with 8 pencils in each box. How many pencils does Harry have in all?
  C   Harry put 6 pencils in 4 groups. How many pencils are in each group?
  D   Harry had 6 pencils and gave 4 away. How many pencils does Harry have left?

Which problem could you write for 6 x 9?

  A   Thomas put 9 markers in 3 groups. How many are in each group?
  B   Thomas had 6 markers and a friend gave him 9 more. How many markers does Thomas have now?
  C   Thomas had 9 markers and gave 6 away. How many markers does Thomas have left?
  D   Thomas's class has 6 boxes of markers with 9 markers in each box. How many markers does Thomas's class have in all?

Which of these best describes all the animal speeds shown?

Animal	Speed (Miles per Hour)
Lizard	18
Squirrel	12
Snake	20

  A   They are all greater than 14.
  B   They are all less than 18.
  C   They are all multiples of 5.
  D   They are all multiples of 2.

Which number sentence solves the problem?
There are 4 trees with 9 birds in each tree.
How many birds are in the trees?

    A   4 + 9 = 13
    B   9 – 4 = 5
    C   9 + 9 + 9 = 27
    D   9 + 9 + 9 + 9 = 36

Arlen keeps his trading cards in a binder. 4 trading cards fit on each page. He has filled 10 pages with trading cards. How many trading cards does he have in the binder?

    A   14
    B   35
    C   40
    D   44

Complete the sentence.

$3 \times 9 = 27$
$3 \times 90 =$

    A   93
    B   270
    C   2700
    D   39

Nolan has 4 juice boxes. Ping has 9 juice boxes. How many more juice boxes does Ping have? Each juice boxes holds 6 ounces. How many more ounces of juice does Ping have than Nolan?

    A   Ping has 13 more juice boxes, and he has 130 ounces more than Nolan.
    B   Ping has 5 more juice boxes, and he has 30 ounces more than Nolan.
    C   Ping has 5 more juice boxes, and he has 25 ounces more than Nolan.
    D   Ping has 4 more juice boxes, and he has 20 ounces more than Nolan.

Robert and David were asked to set up 5 rows of 6 tables in the school gym, but they forgot the product of 5 x 6. Which two multiplication facts can they use to find the total number of tables they will need?

A   1 x 5 and 1 x 6
B   5 x 2 and 5 x 4
C   5 x 5 and 5 x 4
D   5 x 4 and 5 x 0

Which is the missing factor?

$8 \times 6 = ($ ___ $\times 6) + (6 \times 6)$

A   2
B   4
C   6
D   7

Solve the problem below.

$(8 \times 4) \times 2 = (4 \times 2) \times \square$

A   2
B   4
C   6
D   8

Grace counted the number of flowers in 4 vases. There were 5 flowers in each vase. How many flowers were in the 4 vases?

A   20
B   18
C   16
D   9

A master spy uses the first and last names shown in the table. What are all the possible
first and last name combinations he can use?

First Names	Last Names
Tom	Geer
Kevin	Kelly
	Hubble

    A   Tom Geer, Tom Kelly, Tom Hubble, Kevin Geer, Kevin Kelly, Kevin Hubble
    B   Tom Geer, Kevin Geer
    C   Tom Geer, Kevin Kelly, Kevin Hubble
    D   Tom Geer, Tom Hubble, Kevin Kelly, Kevin Hubble

A restaurant had 8 cartons of eggs. Each carton held 6 eggs. The restaurant used 40 of
the eggs at breakfast time. Which of these shows one way to find the number of eggs left?

    A   Multiply 8 by 6 and then add 40.
    B   Multiply 8 by 6 and then subtract 40.
    C   Multiply 8 by 40 and then subtract 6.
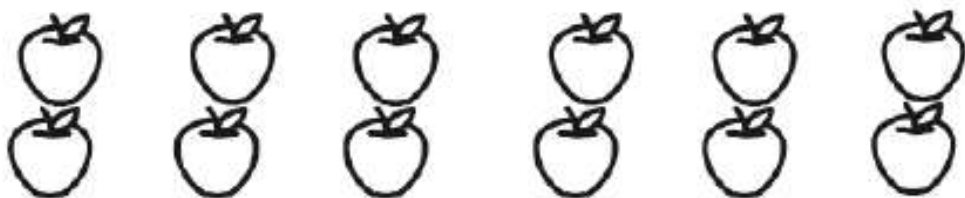   D   Divide 40 by 6 and then add 8.

Mr. Munz has 9 plates. He wants to place an equal number of plates on each of 3 shelves.
How many plates should he place on each shelf?

    A   10
    B   5
    C   3
    D   1

Ralph collects stickers. While looking at his sticker collection, he counted 20 stickers. Each
sticker sheet has 5 stickers on it. How many sheets does Ralph have filled?

    A   4 sheets
    B   8 sheets
    C   12 sheets
    D   20 sheets

Steve has 12 apples. He eats 2 apples each day. How many days can he eat 2 apples until there are none left?

A   2
B   3
C   5
D   6

Madison read 24 books in 6 weeks. If she read the same number of books every week, how many books did Madison read in one week?

A   4
B   6
C   7
D   8

Which division sentence shows that there are 8 groups of 8 in 64?

A   8 ÷ 8 = 1
B   64 ÷ 8 = 8
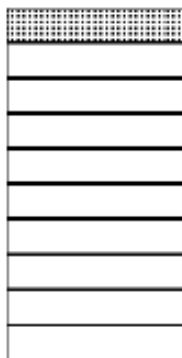C   8 x 64 = 512
D   8 x 8 = 64

Divide 0 by 9.

     A   9

     B   1

     C   0

     D   Cannot be done

Ricky has 12 baseballs and 4 bags. He wants to put the same number of baseballs into each bag. Which number sentence shows how many baseballs he can put in each bag?

     A $12 \times 4 = 48$

     B $12 + 4 = 16$

     C $12 \div 4 = 3$

     D $12 - 4 = 8$

Franz is painting the wall of his room. The shaded part has been painted. What fraction of the wall has been painted?

     A $\frac{1}{5}$

     B $\frac{1}{10}$

     C $\frac{1}{9}$

     D $\frac{1}{20}$

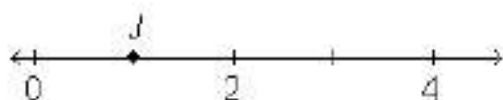Which container has about $\frac{1}{2}$ left?

A

B

C

D

What fraction of the dogs are black?

A $\frac{3}{5}$

B $\frac{3}{6}$

C $\frac{3}{4}$

D $\frac{4}{5}$

What number does point J represent on this number line?

A 1

B $1\frac{1}{4}$

C 2

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

Estimate the fraction of the bar that is shaded.

A $\frac{1}{2}$

B $\frac{2}{3}$

C $\frac{1}{4}$

D $\frac{1}{5}$

Compare. Which symbol makes the statement TRUE?

1			
$\frac{1}{2}$		$\frac{1}{2}$	
$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$
$\frac{1}{8}$ $\frac{1}{8}$	$\frac{1}{8}$ $\frac{1}{8}$	$\frac{1}{8}$ $\frac{1}{8}$	$\frac{1}{8}$ $\frac{1}{8}$

$\frac{3}{4}$ ● $\frac{2}{4}$

A <

B >

C =

D +

Pot pie A is cut into eighths. Pot pie B is cut into fourths. The two pot pies are the same size. Mark has one slice from Pot pie A. Sammy has one slice from Pot pie B. Who has the largest slice?

1							
$\frac{1}{2}$				$\frac{1}{2}$			
$\frac{1}{4}$		$\frac{1}{4}$		$\frac{1}{4}$		$\frac{1}{4}$	
$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$

A   Mark
B   Sammy
C   All the pieces are the same size.
D   Not enough information given

Which of the following fractions is closer to 1 than to 0?

$$\frac{5}{6}, \frac{1}{6}, \frac{2}{4}, \frac{1}{3}$$

A $\frac{1}{6}$

B $\frac{1}{3}$

C $\frac{2}{4}$

D $\frac{5}{6}$

This clock shows what time Eric finished dinner. What time did Eric finish dinner?

A   6:40
B   8:40
C   7:40
D   8:00

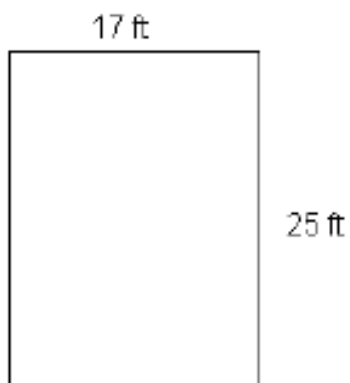Mario went to the zoo with his family.

This clock shows the time they left.		This clock shows the time they returned.

How long was Mario's family gone?

A   3 hours
B   4 hours
C   5 hours
D   6 hours

What is the perimeter of the rectangle?

17 ft

25 ft
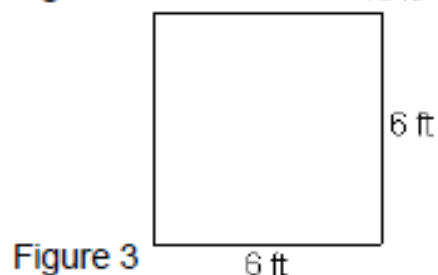
A   67 feet
B   84 feet
C   98 feet
D   99 feet

Mrs. Adami wants to build the square animal pen below.

8 m

How many meters of fencing will she need?

A   8 m
B   16 m
C   32 m
D   40 m

Which of the following figures have a perimeter of 24 ft?

3 ft

Figure 1   9 ft

2 ft

Figure 2   10 ft

6 ft

Figure 3   6 ft

A   Figures 1 and 2
B   Figures 1 and 3
C   Figures 2 and 3
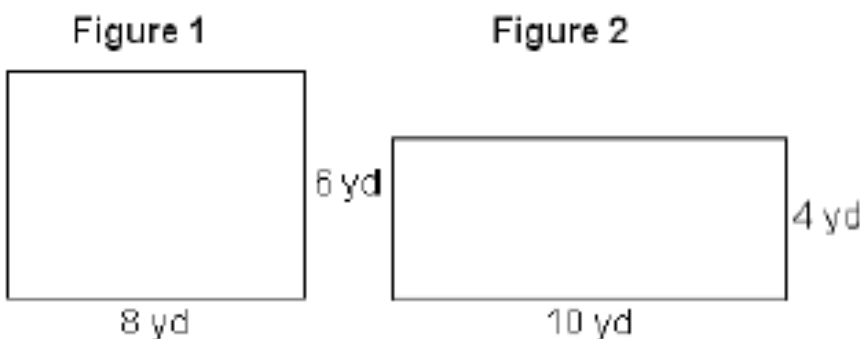D   Figures 1, 2, and 3

What is the area Colleen made with the tile squares?
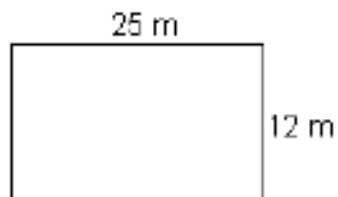
1 foot

A   14
B   16
C   21
D   25

Which figure has a larger permimeter?

Figure 1   Figure 2

6 yd

8 yd   10 yd

4 yd

A   Figure 1
B   Figure 2
C   Both figures have the same perimeter.
D   Not enough information

What is the area of the figure?

25 m

12 m
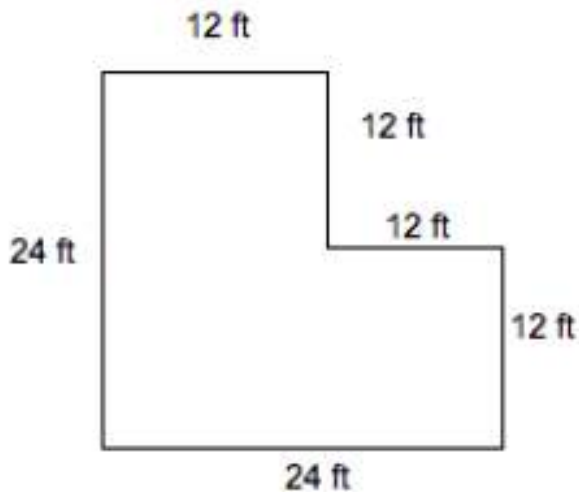
A   37 square meters
B   74 square meters
C   288 square meters
D   300 square meters

The perimeter of a square is 28 feet. What is the area of the square?
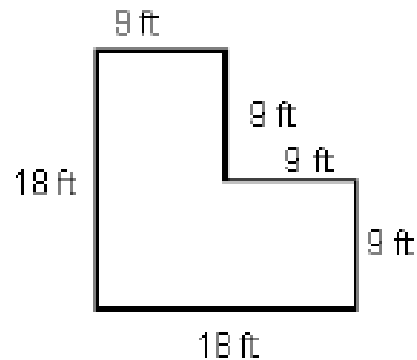
A   28 square feet
B   49 square feet
C   50 square feet
D   784 square feet

What is the area of the figure?

12 ft

12 ft

24 ft

12 ft

12 ft

24 ft

A   46 square feet
B   144 square feet
C   423 square feet
D   432 square feet

What is the area of the figure?

9 ft

9 ft

9 ft

18 ft

9 ft

18 ft

A   72 square feet
B   162 square feet
C   243 square feet
D   324 square feet

Larissa had 30 square color tiles. How could she arrange the tiles to form a rectangle with the greatest perimeter?

     A   1 by 30 rectangle
     B   2 by 15 rectangle
     C   3 by 10 rectangle
     D   5 by 6 rectangle

Mr. Jenkins gave each group in his class 42 square tiles and challenged them to use all the tiles to make a rectangle with the smallest perimeter. Which of the following arrangements of 42 square tiles has the smallest perimeter?

A　1 by 42 rectangle
B　2 by 21 rectangle
C　3 by 14 rectangle
D　6 by 7 rectangle

Jennifer's grandmother made a pie for her dessert. The pie is made of 12 equal parts. What fraction of the pie is one part?
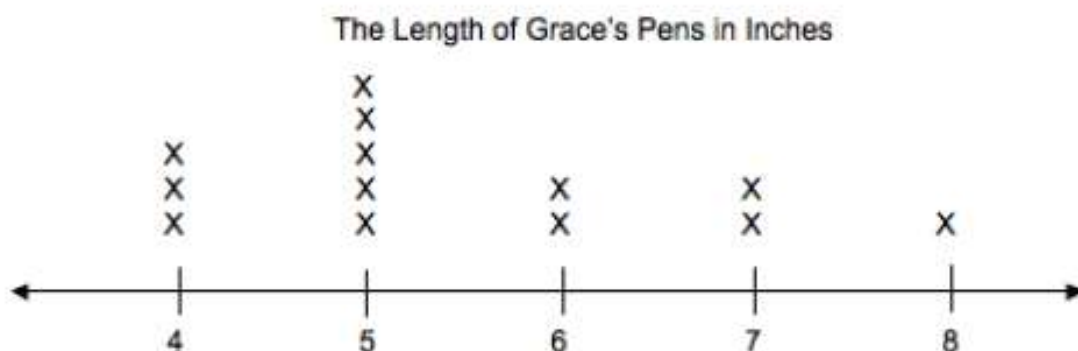
A　$\dfrac{12}{12}$

B　$\dfrac{1}{12}$

C　$\dfrac{1}{1}$

D　$\dfrac{2}{12}$

Which is the best estimate for the capacity of a family size drink bottle?
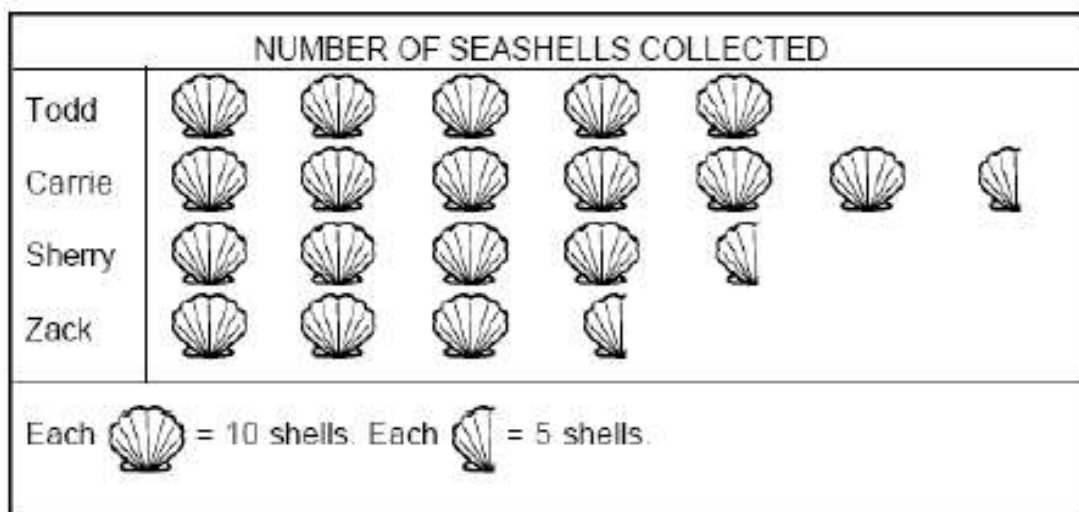
A　1 cup
B　2 cups
C　2 quarts
D　2 gallons

Grace measures all of the pens in her desk. The line plot shows the lengths of her pens in inches. How long is her longest pen?

The Length of Grace's Pens in Inches

```
                                X
                                X
         X                      X
         X                      X      X           X
         X                      X      X           X
         X                      X      X           X       X
      ___|_____|_____|_____|_____|_____
         4                5        6        7        8
```

A   5 inches
B   6 inches
C   7 inches
D   8 inches

Use the pictograph below.

NUMBER OF SEASHELLS COLLECTED

Todd

Carrie

Sherry

Zack

Each 🐚 = 10 shells. Each 🐚 = 5 shells.
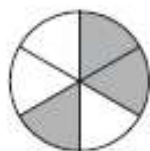
Which person has the most shells?

A   Todd
B   Carrie
C   Sherry
D   Zack

Mark the best answer.

1. Which number means the same as
80,000 + 5,000 + 600 + 20 + 5?

 A 8,005,625

 B 850,625

 C 805,625

 D 85,625

2. Look at the fraction model below.

Which choice gives the unit
fraction for each part of the whole
and the fraction of the whole that
is shaded?

 A $\frac{3}{4}$

 B $\frac{1}{8}, \frac{3}{8}$

 C $\frac{1}{6}, \frac{3}{6}$
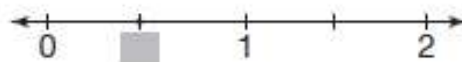
 D $\frac{1}{4}, \frac{2}{4}$

3. Which list shows the numbers in
order from least to greatest?

 A 3,546; 3,654; 3,564

 B 3,564; 3,654; 3,546

 C 3,546; 3,564; 3,654

 D 3,654; 3,564; 3,546

4. Which shows 296 rounded to the
nearest ten?

 A 200

 B 290

 C 300

 D 310

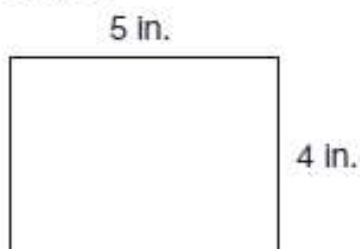5. What fraction is shown on the
number line?

 A $\frac{1}{4}$

 B $\frac{1}{2}$

 C $\frac{3}{4}$

 D $1\frac{1}{4}$

6. The cafeteria sold 128 ham
sandwiches, 36 cheese
sandwiches, and 45 salads. About
how many sandwiches were sold?

 A 220

 B 190

 C 170

 D 130

7. What is the perimeter of this shape?

   5 in.

   4 in.

   A 18 inches

   B 18 square inches

   C 20 inches

   D 20 square inches

8. Last Saturday, Marge drove to the mountains. She drove 238 miles in the morning and 154 miles in the afternoon. How many more miles did she drive in the morning than in the afternoon?

   A 392 miles

   B 328 miles

   C 124 miles

   D 84 miles

9. Which is the best estimate of the mass of a small dog?

   A 40 kilograms

   B 4 kilograms

   C 400 grams
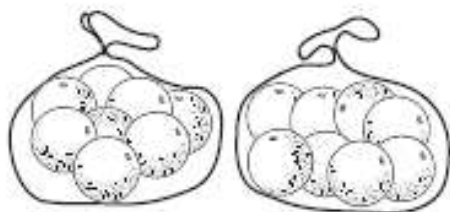
   D 40 grams

10. What is the area of this shape?

    5 ft

    3 ft

    A 16 square feet

    B 16 feet

    C 15 square feet

    D 15 feet

11. Which number sentence describes the stamps below?

    A $3 + 4 = 7$

    B $4 + 4 = 8$

    C $3 \times 5 = 15$

    D $3 \times 4 = 12$

12. Which fraction is equivalent to $\frac{6}{8}$?

    A $\frac{4}{5}$

    B $\frac{3}{4}$

    C $\frac{2}{3}$

    D $\frac{1}{2}$

13. Miguel bought 2 bags of oranges. There are 8 oranges in each bag. Which number sentence shows how many oranges Miguel bought?

A $8 - 2 = 6$

B $8 + 2 = 10$

C $2 \times 8 = 16$

D $8 \div 2 = 4$

14. Carla is putting some pictures in an album. If she puts 6 pictures on each page, how many pictures are on 8 pages?

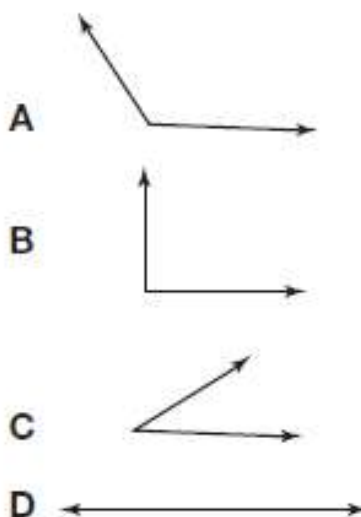**A** 48 pictures

B 40 pictures

C 15 pictures

D 8 pictures

15. Look at the pictograph below. How many more students chose dogs as their favorite pets than cats?

Students' Favorite Pets	
Pets	Number of Votes
Cat	👥👥
Dog	👥👥👥👥
Fish	👤
Hamster	👥👥

KEY: Each 👤 equals 3 students

A 4

B 6

C 12

D 18

16. Which of the following is a right angle?

A

B

C

D

17. Which shape has four right angles and all sides equal in length?

   A Rectangle   **C** Square

   B Rhombus   **D** Trapezoid

18. Which of the following number sentences does **NOT** belong in the same fact family?

   A $4 + 8 = 12$ **C** $32 \div 4 = 8$

   B $4 \times 8 = 32$ **D** $32 \div 8 = 4$

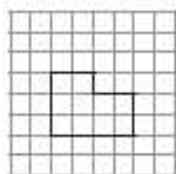**19.** Look at the number lines below.

Which is a correct statement?

   A $\frac{3}{6} = \frac{5}{8}$ **C** $\frac{3}{6} < \frac{5}{8}$

   B $\frac{3}{6} > \frac{5}{8}$ **D** $\frac{3}{6} < \frac{3}{8}$

20. What is the area of the irregular figure?

   A 20 square units

   B 14 square units

   C 12 square units

   D 10 square units

21. How many wheels are on 4 wagons?

Wagons	Wheels
1	4
2	8
3	12
4	?

   A 20   **C** 16

   B 18   **D** 14

22. Which division sentence is shown by the repeated subtraction?

$$27 - 9 = 18$$
$$18 - 9 = 9$$
$$9 - 9 = 0$$

   A $27 \div 9 = 4$

   B $27 \div 9 = 3$

   C $18 \div 2 = 9$

   D $36 \div 4 = 6$

23. Which value for *b* will make the equation true?

$$15 + b = 22$$

   A $b = 2$ **C** $b = 7$

   B $b = 6$ **D** $b = 9$

24. Tom arrived for a meeting at 8:55 A.M. He was 25 minutes late for the start of the meeting. At what time did the meeting start?

   A 8:45 A.M.   **C** 8:25 A.M.

   B 8:30 A.M.   **D** 8:20 A.M.