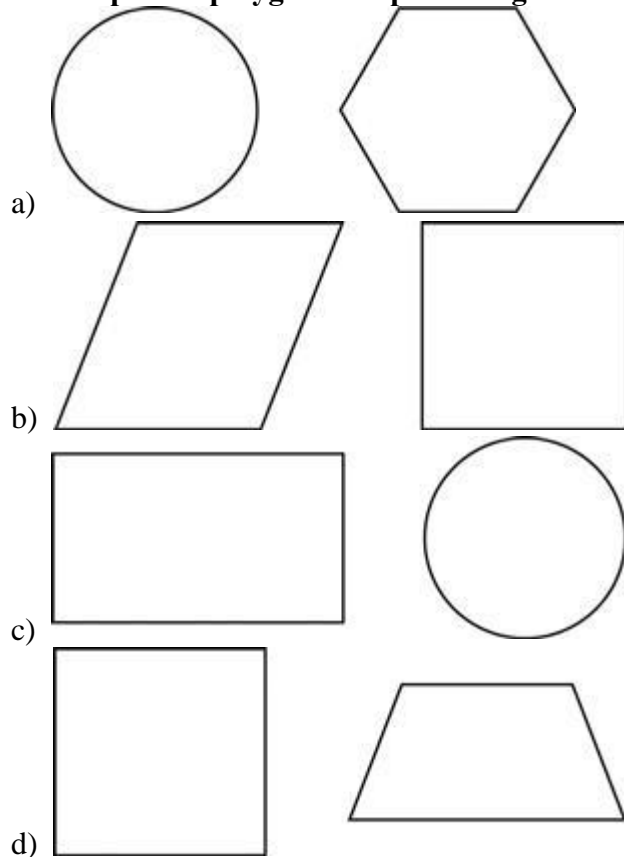


Summer Packets June 2018- August 2018

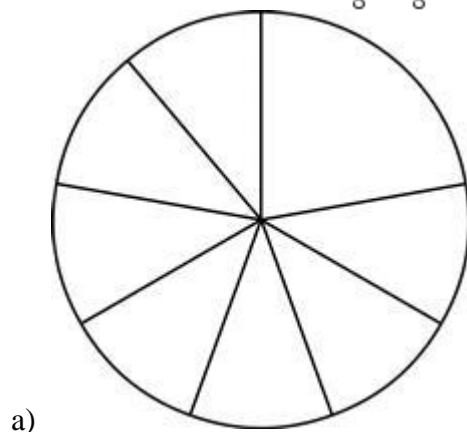
MATH GRADE 4 (Tozoglu)

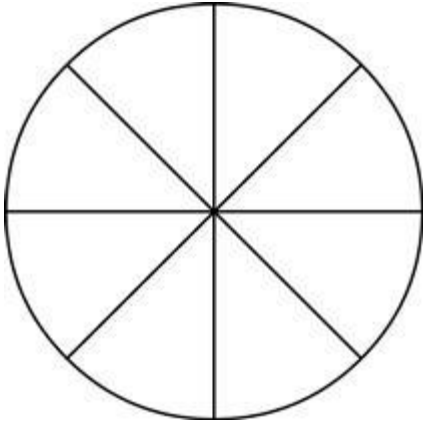
1) Which pair of polygons are parallelograms?



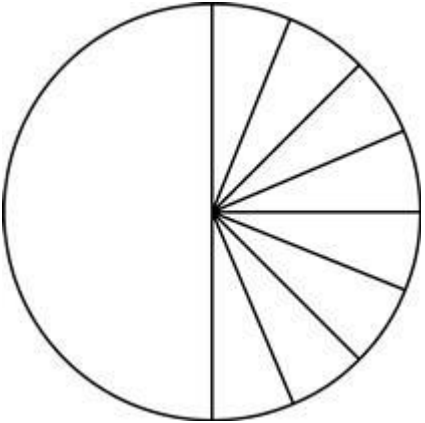
2) Which figure is BEST represented by the equation below?

$$\frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} = \frac{8}{8}$$

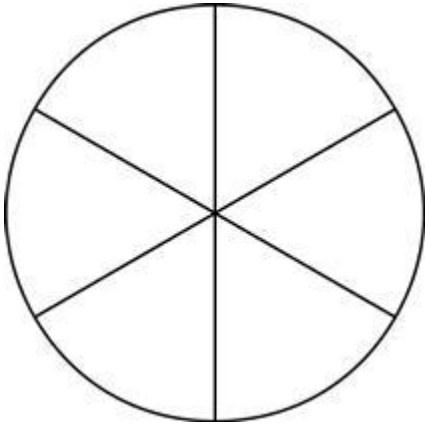




b)



c)



d)

3) A rectangle is divided into equal parts.



Which fraction is represented by the area of the rectangle that is shaded gray?

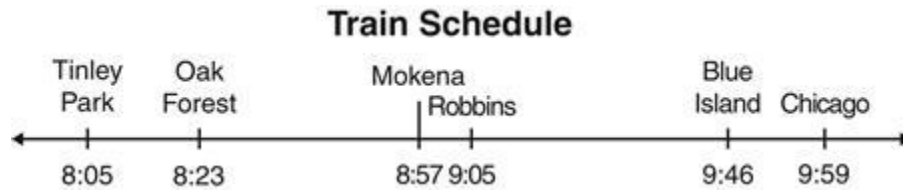
- a) $\frac{1}{6}$
- b) $\frac{1}{5}$

- c) $\frac{5}{1}$
- d) $\frac{6}{1}$

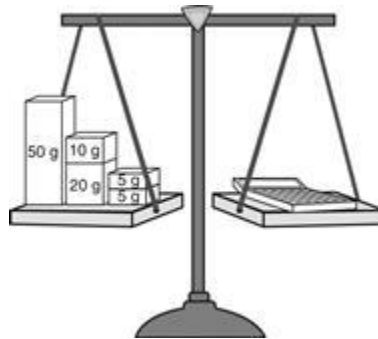
4) Which BEST represents the time shown on the clock below?



- a) 8:10
 - b) 8:15
 - c) 8:20
 - d) 8:25
- 5) How many minutes does it take the Chicago train to travel from Robbins to Blue Island?



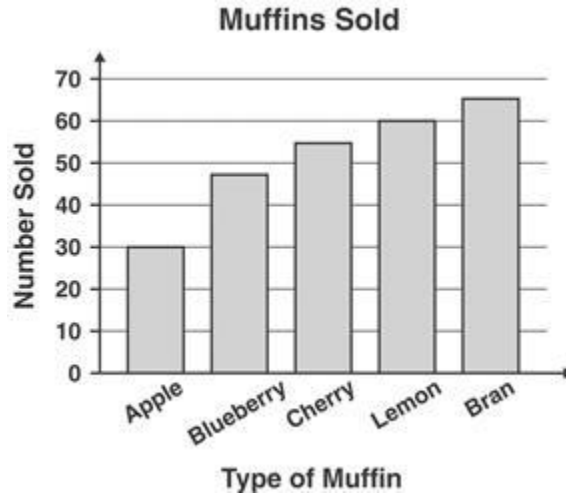
- a) 18 minutes
 - b) 34 minutes
 - c) 41 minutes
 - d) 54 minutes
- 6) A balance is used to find the mass of a calculator.



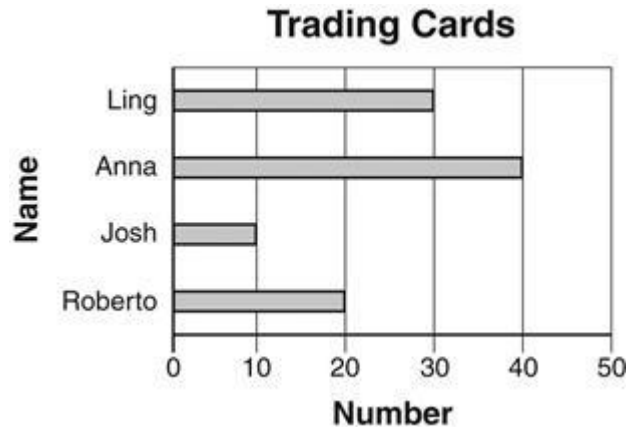
What is the mass of the calculator?

- a) 80 grams
- b) 85 grams

- c) 90 grams
 - d) 95 grams
- 7) **Which item would have a mass of about 1 gram?**
- a) fourth-grade student
 - b) paper clip
 - c) automobile
 - d) textbook
- 8) **The graph below shows the number of each type of muffin sold at a bakery one morning.**

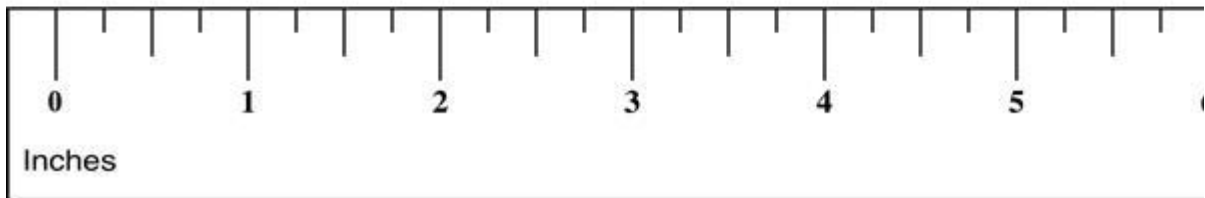


- Which type of muffin sold twice as many as the number of apple muffins sold?**
- a) Blueberry
 - b) Cherry
 - c) Lemon
 - d) Bran
- 9) **The graph shows the number of trading cards four friends have.**



- How many more trading cards does Anna have than Josh?**
- a) 3
 - b) 4
 - c) 10

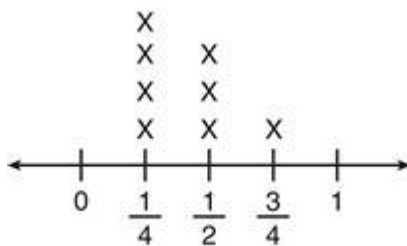
- d) 30
 10) What is the length of the photo to the nearest $\frac{1}{2}$ inch?



- a) 3 inches
 b) $3\frac{1}{4}$ inches
 c) $3\frac{1}{2}$ inches
 d) $3\frac{3}{4}$ inches
- 11) Miguel recorded the lengths of 8 nails in inches.

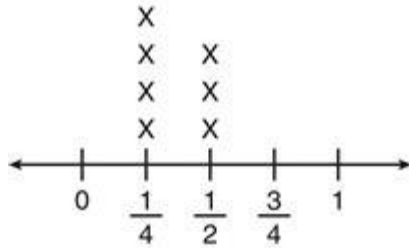
$$\frac{3}{4}, \frac{1}{2}, \frac{1}{4}, \frac{1}{4}, \frac{1}{2}, \frac{1}{4}, \frac{1}{4}, \frac{1}{2}$$

Which line plot shows the lengths of all 8 nails in inches?



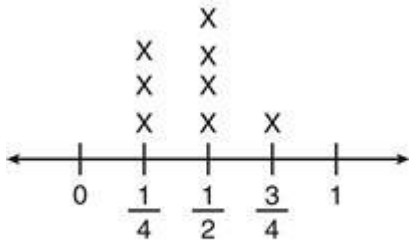
Key: X = 1 Nail

a)



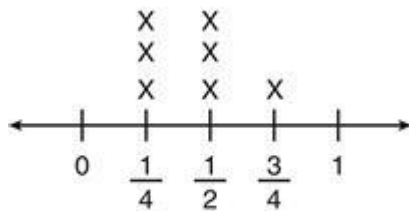
Key: X = 1 Nail

b)



Key: X = 1 Nail

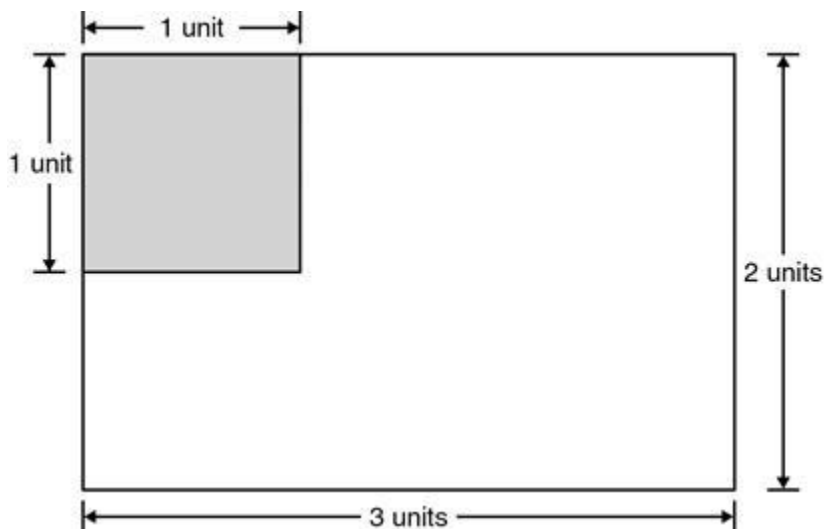
c)



Key: X = 1 Nail

d)

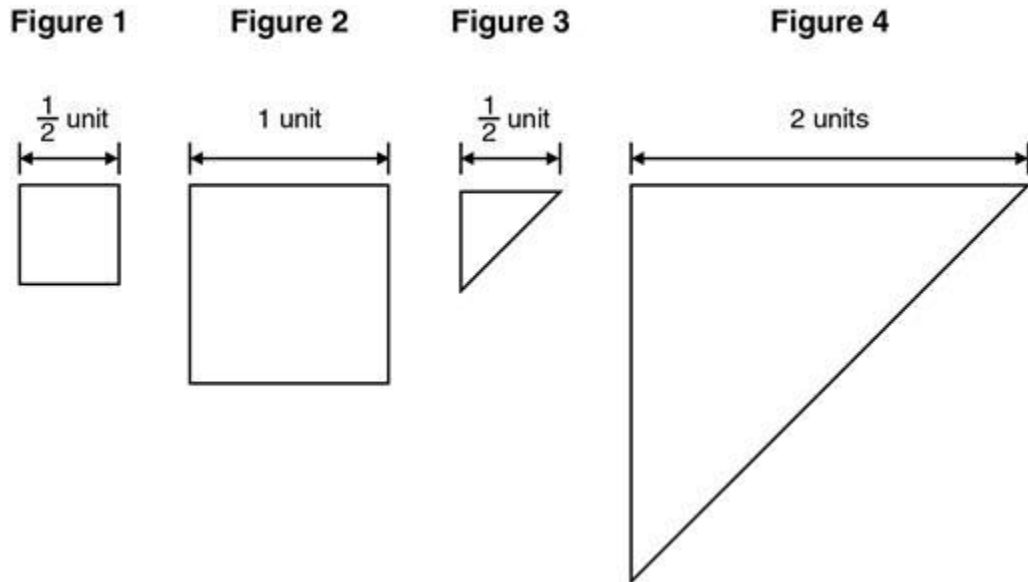
12) Roberto drew a rectangle. Part of the rectangle is shaded.



What is the total area of the shaded part of the rectangle?

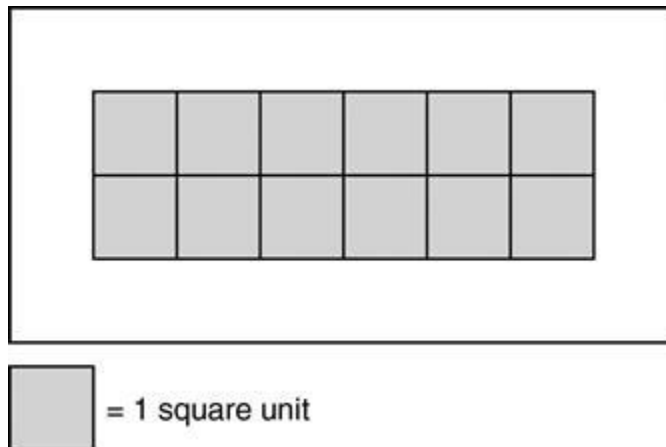
- a) 1 square unit
- b) 5 square units
- c) 6 square units

- d) 7 square units
 13) The length of one side of each of four figures is shown.



Which figure shows 1 square unit of area?

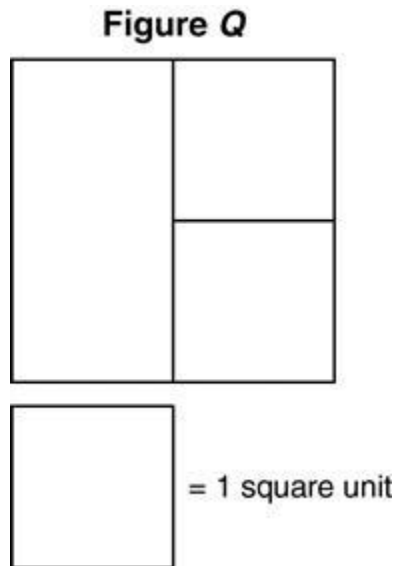
- a) Figure 1
 b) Figure 2
 c) Figure 3
 d) Figure 4
 14) The shaded area of the rectangle shown below is covered by 12 unit squares without gaps or overlaps. The shaded area is 12 square units.



If the unshaded area is also covered without gaps or overlaps by unit squares, what is the area of the entire rectangle?

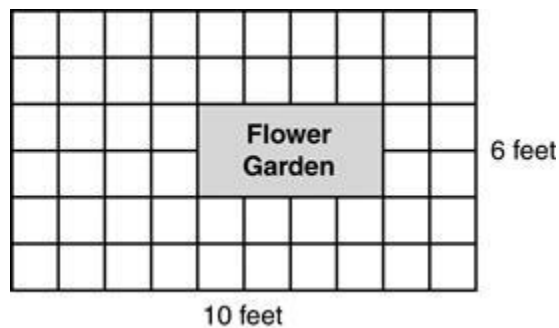
- a) 12 square units
 b) 20 square units
 c) 21 square units
 d) 32 square units

- 15) Figure Q is divided into 3 parts, as shown below.



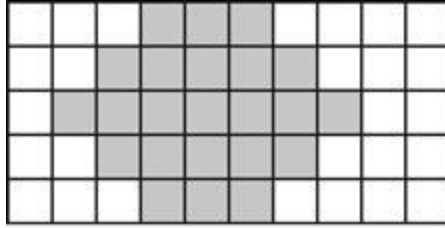
Which statement about Figure Q is correct?

- a) Figure Q appears to have an area of 2 square units, because there are 2 squares in Figure Q .
 - b) Figure Q appears to have an area of 3 square units, because Figure Q is divided into 3 parts.
 - c) Figure Q appears to have an area of 4 square units, because a total of 4 of the small squares would cover Figure Q .
 - d) Figure Q appears to have an area of 6 square units, because the rectangular part of Figure Q could be divided into 4 equal squares.
- 16) **Judy visited a flower garden.**



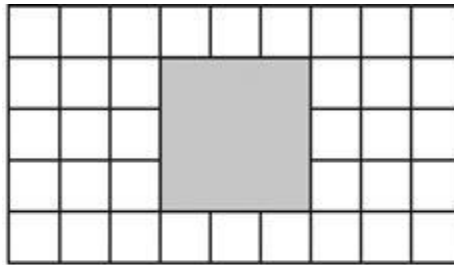
What is the area of the flower garden?

- a) 4 square feet
 - b) 8 square feet
 - c) 16 square feet
 - d) 60 square feet
- 17) **A gray design is painted onto a white tiled wall, as shown below. Each tile is one unit by one unit.**



What is the area of the unpainted wall?

- a) 23 square units
 - b) 27 square units
 - c) 30 square units
 - d) 50 square units
- 18) **Dr. Allison is painting her name on the window of her office. She will use the area shaded in the picture for her name.**

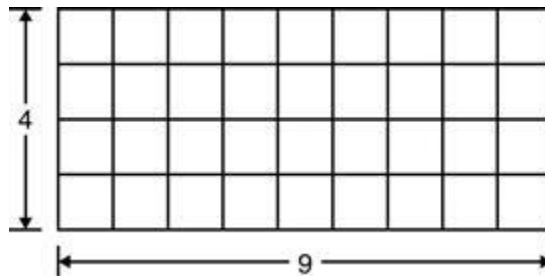


Scale: Each represents 1 square inch

Area = length \times width

Which expression shows the area, in square inches, of the window that will be painted?

- a) 3×3
 - b) $3 \times 3 \times 4$
 - c) $3 + 3 + 4 + 4$
 - d) $3 + 4$
- 19) **Karen arranged one layer of boxes in a section of her closet floor. Each box represents 1 unit square.**

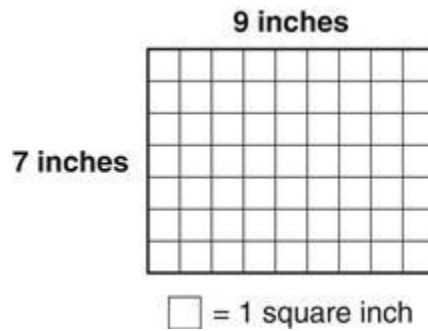


What is the area of this section of Karen's closet floor in square units?

- a) 13
- b) 26

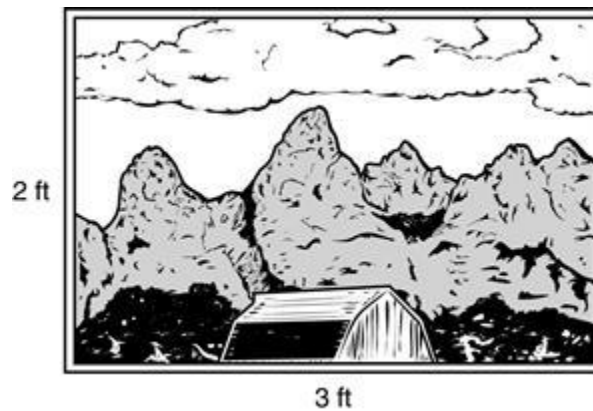
- c) 36
- d) 72

20) What is the area of the figure below?



- a) 16 square inches
- b) 18 square inches
- c) 32 square inches
- d) 63 square inches

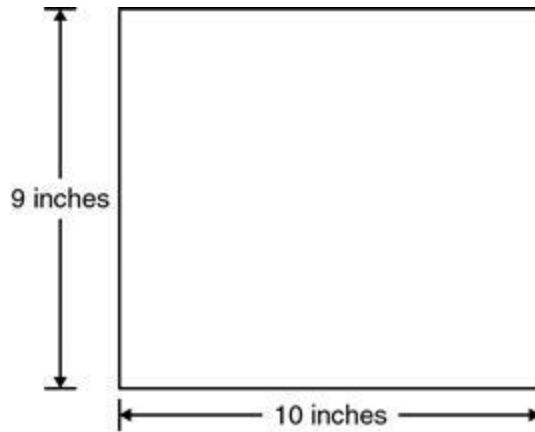
21) The dimensions of the rectangular poster below are shown in feet.



What is the area of this poster?

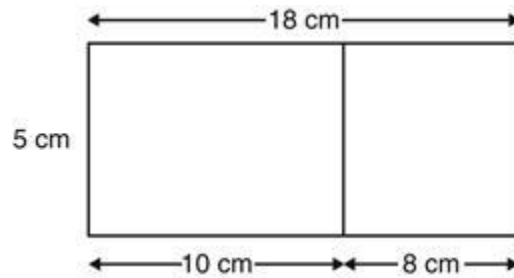
- a) 5 square feet
- b) 6 square feet
- c) 10 square feet
- d) 20 square feet

22) A drawing of the rectangular top of Marcel's laptop computer is shown below.



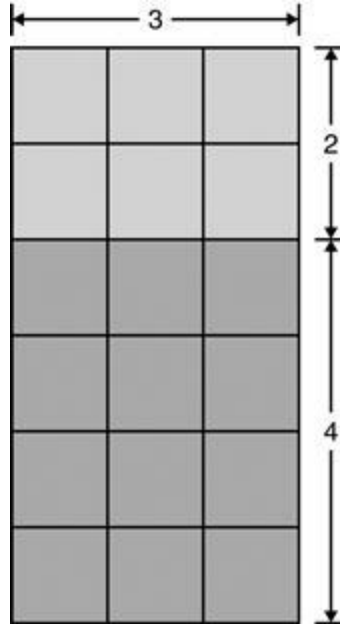
Which expression can be used to find the area, in square inches, of the top of Marcel's laptop computer?

- a) $9 + 10 + 9 + 10$
 - b) $9 \times 10 \times 9 \times 10$
 - c) $9 + 10$
 - d) 9×10
- 23) To calculate the area of a rectangle, Deshawn divided the rectangle into two smaller rectangles. The area of the rectangle is $(5 \times 10) + (5 \times 8)$ centimeters.



Which expression below is equivalent to $(5 \times 10) + (5 \times 8)$?

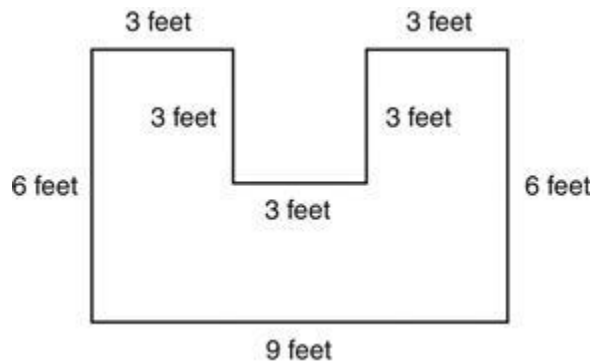
- a) $(5 + 5) \times (10 + 8)$
 - b) $5 \times (10 + 8)$
 - c) $(5 \times 5) + (10 \times 8)$
 - d) $5 + (10 \times 8)$
- 24) Annie and Jake put tiles down on a rectangular floor. The model below is shaded to show the tiles Annie put down and the tiles Jake put down.



Which equation can be used to determine the area of this model?

- a) $3 \times (2+4) = (3 \times 2) + (3 \times 4)$
- b) $3 \times (2+4) = (3+2 \times 3+4)$
- c) $2 \times (3+4) = (2 \times 4) \times (2 \times 3)$
- d) $2 \times (3+4) = (2+4) \times (2+3)$

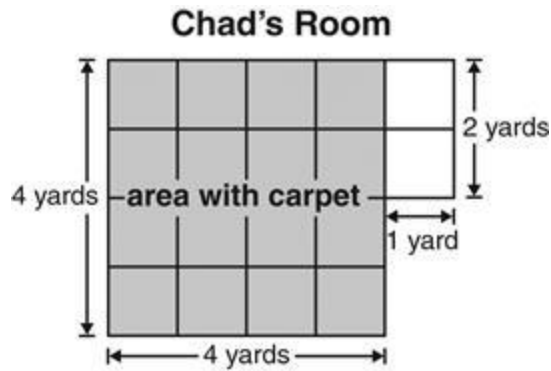
25) Juan drew a diagram of his garden.



What is the area of his garden?

- a) 30 ft^2
- b) 37 ft^2
- c) 45 ft^2
- d) 54 ft^2

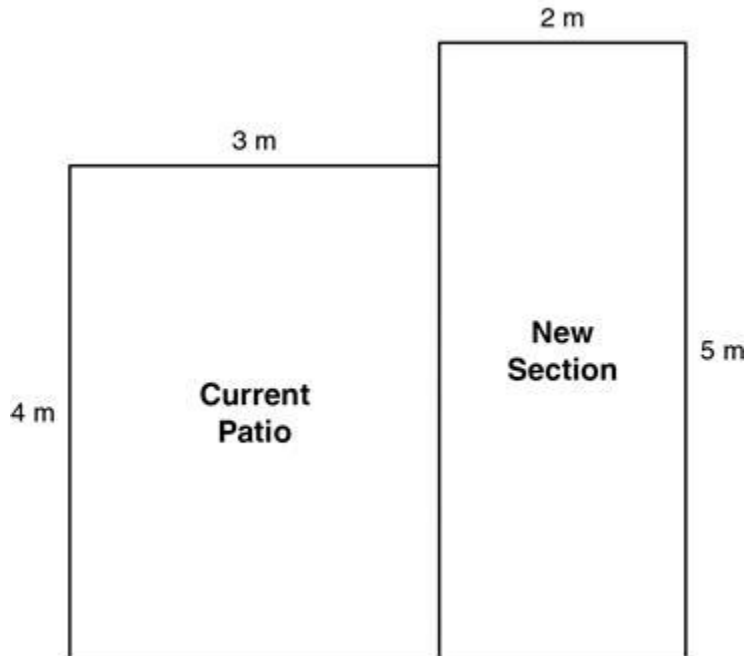
26) In the diagram below, the shaded squares represent the area of Chad's bedroom floor that is covered with carpet and the white squares represent the area of the floor that is NOT covered with carpet.



$$\text{Area} = \text{length} \times \text{width}$$

What is the total area of Chad's bedroom floor?

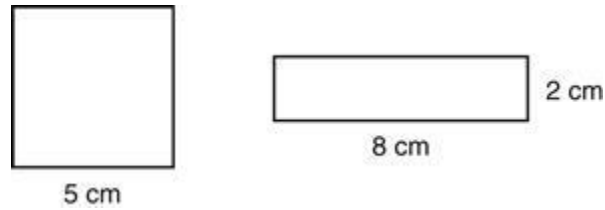
- a) 14 square yards
 - b) 16 square yards
 - c) 18 square yards
 - d) 20 square yards
- 27) **Neal is adding a new section to his current patio. The side lengths of each rectangular section are shown in meters (m) in the drawing below.**



What is the total area of the two rectangular sections of the patio?

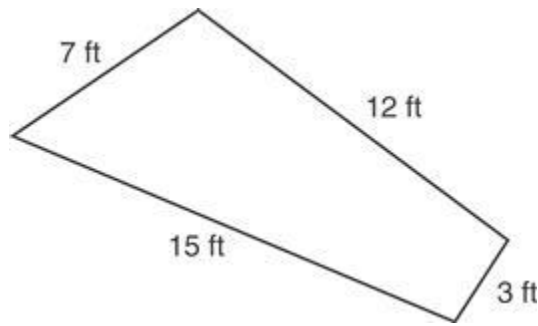
- a) 20 square meters
- b) 22 square meters
- c) 49 square meters
- d) 70 square meters

28) The square and rectangle below have equal perimeters.



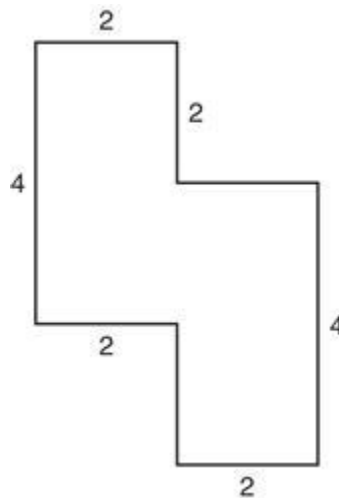
Based on this information, which statement is true?

- a) The figures are both squares.
 - b) The figures have different areas.
 - c) The figures have the same dimensions.
 - d) The figures have different angle measures.
- 29) Joe's backyard looks like this.



He wants to put a fence around the yard. How much fencing does he need?

- a) 27 ft
 - b) 30 ft
 - c) 37 ft
 - d) 40 ft
- 30) All angles shown on the figure are right angles.



What is the perimeter of the figure?

- a) 16 units

- b) 18 units
- c) 20 units
- d) 22 units

31) **Matt visited a lighthouse that is 142 feet tall. A picture of it is shown below.**



How many feet tall is the lighthouse, rounded to the nearest ten feet?

- a) 100
 - b) 140
 - c) 150
 - d) 200
- 32) **What is the number 179 rounded to the nearest hundred?**
- a) 170
 - b) 180
 - c) 190
 - d) 200
- 33) **Juanita had four bags of marbles. Juanita rounded the number of marbles in each bag to the nearest ten.**



Which bag was rounded to 370 marbles?

- a) 359
- b) 363
- c) 365
- d) 375

34) Look at the set of number sentences.

$$\begin{array}{l} 13 - 5 = 8 \\ \quad \quad ? \\ 5 + 8 = 13 \\ 8 + 5 = 13 \end{array}$$

Which number sentence would complete the set?

- a) $8 - 5 = 3$
- b) $5 + 3 = 8$
- c) $5 + 5 = 10$
- d) $13 - 8 = 5$

35) Linda practiced her math facts by writing this fact family.

$$\begin{array}{l} 24 - 10 = 14 \\ 24 - 14 = 10 \\ 10 + 14 = 24 \end{array}$$

Which equation will correctly complete the fact family?

- a) $14 + 24 = 38$
- b) $14 - 10 = 4$
- c) $14 + 10 = 24$
- d) $38 - 24 = 14$

36) Ross wrote part of a fact family.

$$\begin{array}{l} 9 + 8 = 17 \\ 8 + 9 = 17 \\ 17 - 8 = 9 \end{array}$$

Which equation will correctly complete the fact family?

- a) $25 + 9 = 34$
- b) $17 + 8 = 25$
- c) $25 - 9 = 16$
- d) $17 - 9 = 8$

37)
$$\begin{array}{r} 625 \\ - \quad 16 \\ \hline \end{array}$$

- a) 611
- b) 609
- c) 519
- d) 511

38) $9 \times 70 =$

- a) 63
- b) 630
- c) 6300
- d) 63,000

39) A box contains 9 light bulbs. How many total light bulbs are there in 10 boxes?

- a) 9
- b) 10
- c) 90
- d) 100

40) **Stephan has these toys in his room.**



What fraction of the toys has wheels?

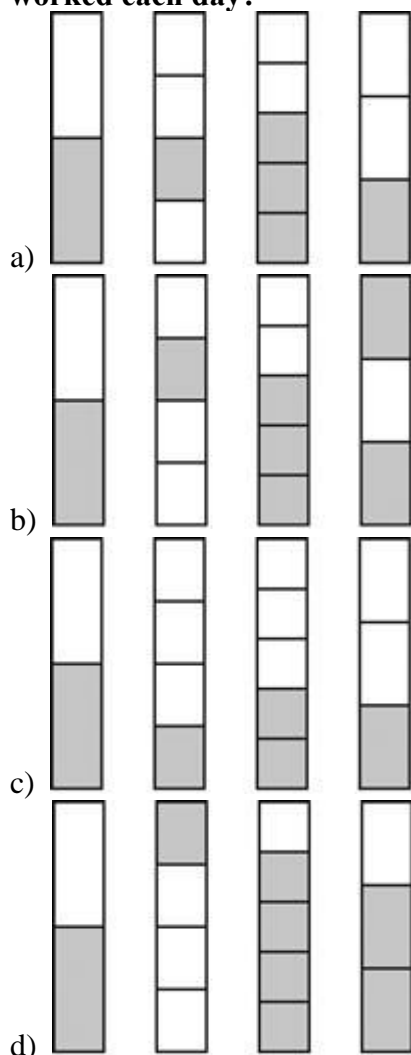
- a) $\frac{3}{5}$
- b) $\frac{3}{8}$
- c) $\frac{5}{8}$
- d) $\frac{8}{3}$

41) **Jeremiah worked for several days cleaning up a vacant lot in his neighborhood. He recorded the number of hours he worked in the table below.**

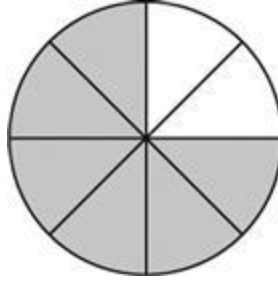
Hours Worked

Day	Number of Hours Worked
1	$\frac{1}{2}$
2	$\frac{1}{4}$
3	$\frac{3}{5}$
4	$\frac{2}{3}$

Which model BEST uses shaded areas to represent the number of hours Jeremiah worked each day?

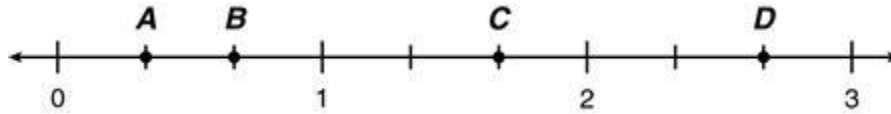


42) What fraction of the circle is shaded?



- a) $\frac{1}{6}$
- b) $\frac{2}{6}$
- c) $\frac{1}{8}$
- d) $\frac{6}{8}$

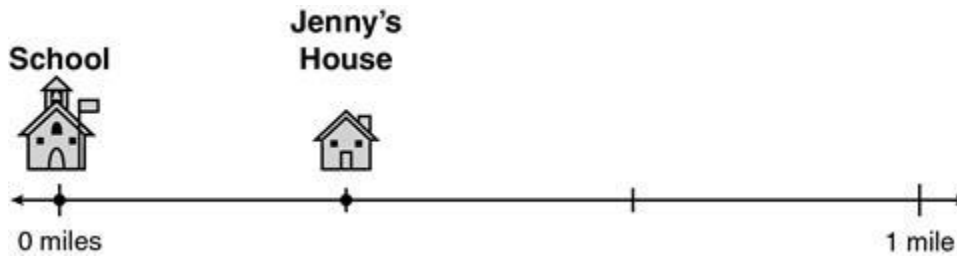
43) A number line is shown below.



Which point shows the fraction $\frac{1}{3}$?

- a) Point A
- b) Point B
- c) Point C
- d) Point D

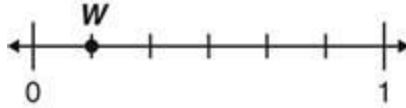
44) The points on the number line show where two buildings are on a street.



How far is Jenny's house from the school?

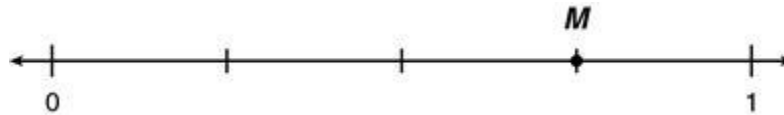
- a) 0 miles
- b) $\frac{1}{3}$ mile
- c) $\frac{1}{2}$ mile
- d) 1 mile

45) What is the value of Point W?



- a) $\frac{1}{6}$
- b) $\frac{3}{6}$
- c) $\frac{5}{6}$
- d) 1

46) Which fraction does Point *M* represent on the number line?



- a) $\frac{1}{4}$
- b) $\frac{2}{4}$
- c) $\frac{3}{4}$
- d) $\frac{4}{4}$

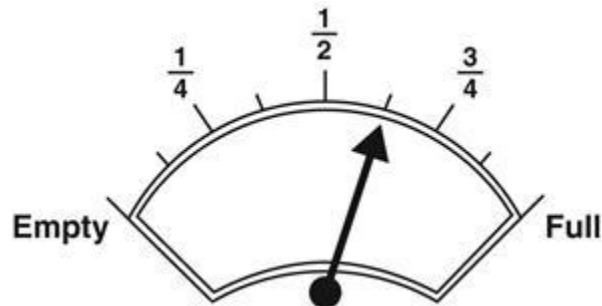
47) The number line shown is divided into 10 equal parts between 0 and 1.



Which fraction BEST represents the length of the line segment?

- a) $\frac{3}{10}$
- b) $\frac{35}{100}$
- c) $\frac{40}{100}$
- d) $\frac{3}{4}$

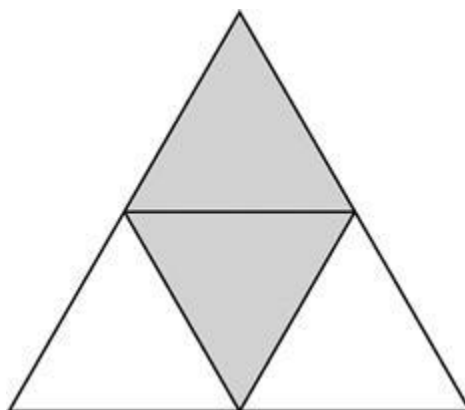
48) The gas dial in Mrs. Dodd's car shows how much gas is in her gas tank.



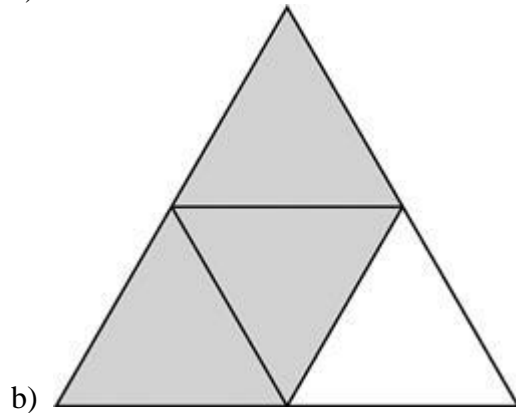
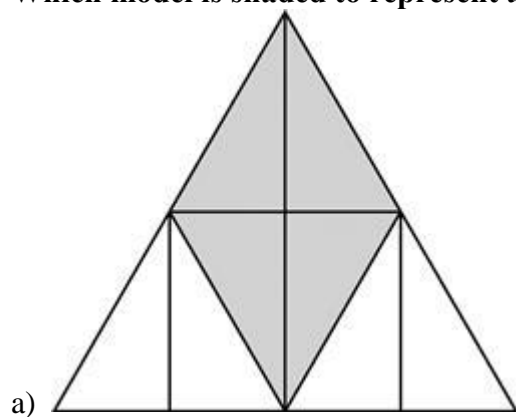
How full does Mrs. Dodd's gas tank appear to be?

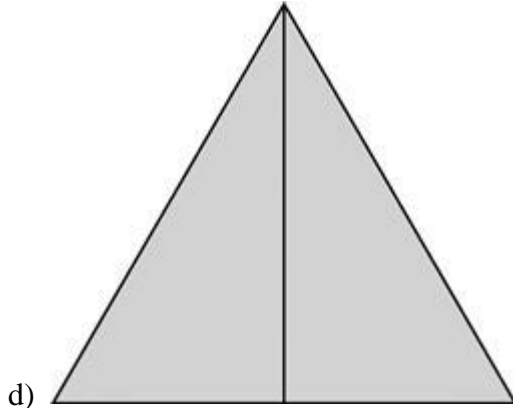
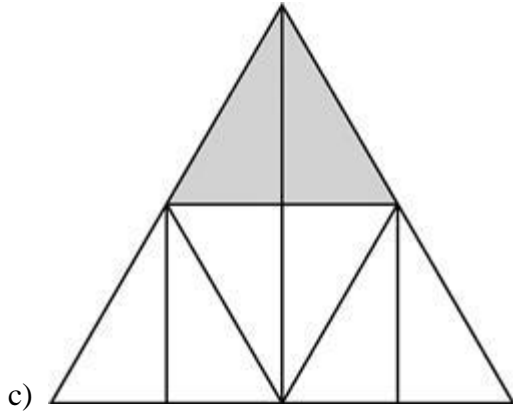
- a) $\frac{1}{2}$
- b) $\frac{2}{3}$
- c) $\frac{3}{4}$
- d) $\frac{5}{8}$

49) The model below is shaded to represent a fraction.

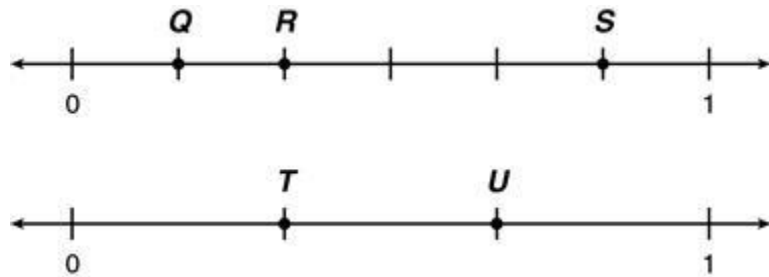


Which model is shaded to represent an equal fraction?



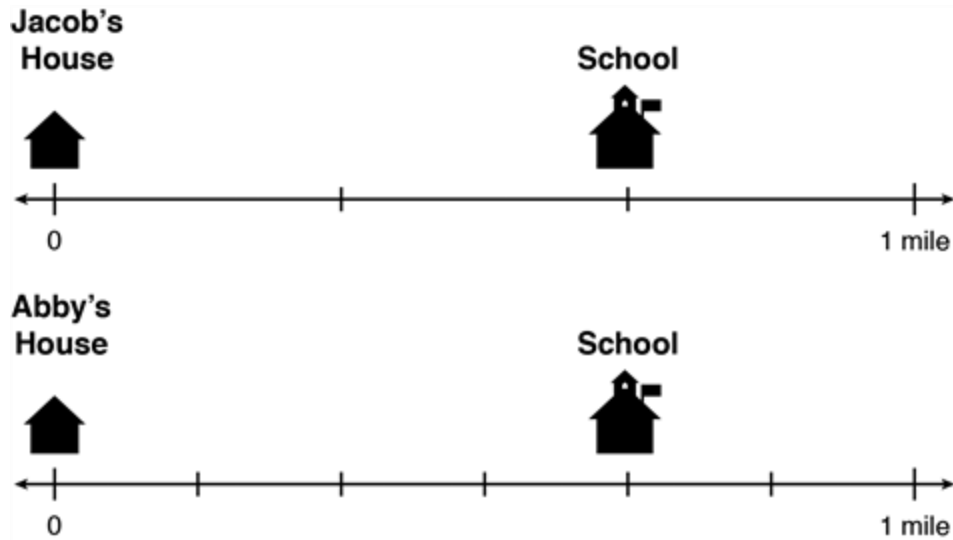


50) Two number lines are shown below.



Which two points BEST represent equal fractions?

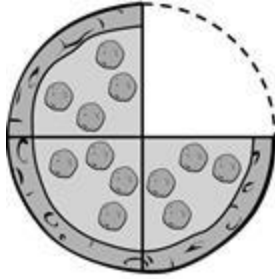
- a) Point Q and Point T
 - b) Point S and Point U
 - c) Point R and Point U
 - d) Point R and Point T
- 51) The two number lines represent the distances Jacob and Abby walk from their houses to their school.



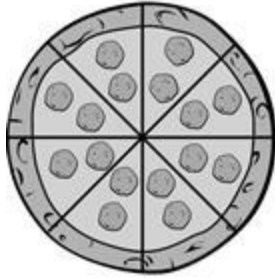
Which equation BEST represents the distances, in miles, Jacob and Abby walk from their houses to their school?

- a) $\frac{2}{3} = \frac{2}{6}$
- b) $\frac{2}{3} = \frac{4}{6}$
- c) $\frac{2}{6} = \frac{4}{6}$
- d) $\frac{2}{9} = \frac{4}{9}$

52) Julia and Linda each made a pizza. Julia cut her pizza into four equal pieces. Linda cut her pizza into eight equal pieces. Julia ate $\frac{1}{4}$ of her pizza.



Julia's

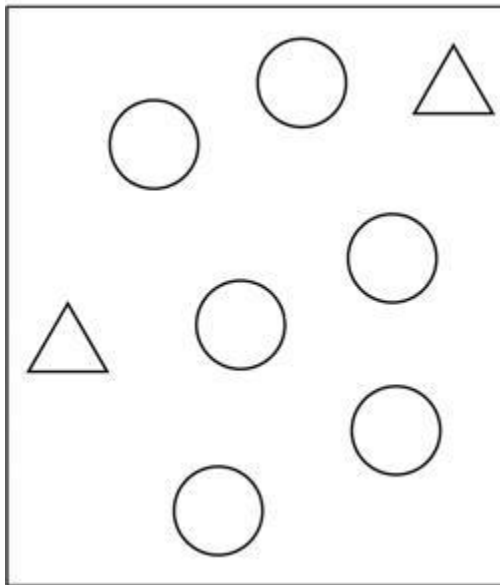


Linda's

How many pieces of pizza must Linda eat to equal the same fraction of pizza eaten by Julia?

- a) 1
- b) 2
- c) 3
- d) 4

53) Erin has a box of circles and triangles.



What fraction of the shapes are triangles?

- a) $\frac{1}{3}$

b) $\frac{1}{4}$

c) $\frac{2}{6}$

d) $\frac{3}{4}$

54) Which fraction is equal to the whole number 21?

a) $\frac{10}{11}$

b) $\frac{31}{10}$

c) $\frac{21}{1}$

d) $\frac{1}{21}$

55) Which whole number can also be written as the fraction $\frac{12}{2}$?

a) 6

b) 10

c) 14

d) 24

56) Which whole number can also be written as the fraction $\frac{4}{1}$?

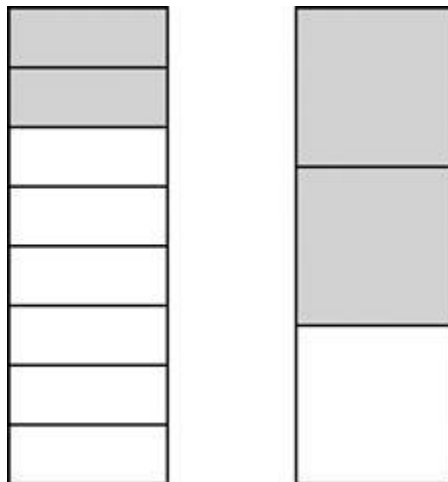
a) 1

b) 2

c) 3

d) 4

57) The models below are shaded to represent two different fractions.



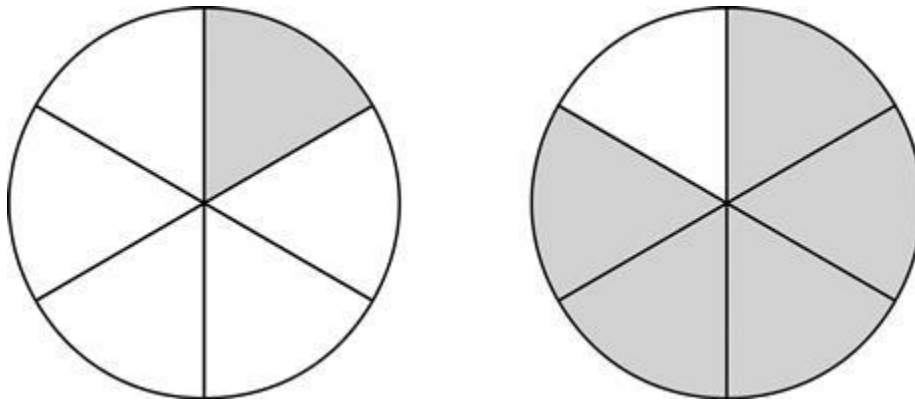
Which comparison of these shaded fractions is true?

a) $\frac{2}{8} < \frac{2}{3}$

b) $\frac{2}{6} = \frac{2}{3}$

- c) $\frac{2}{8} > \frac{2}{5}$
 d) $\frac{2}{6} > \frac{2}{3}$

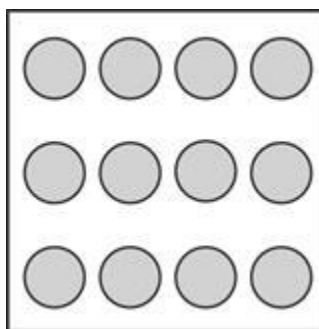
58) These circles are shaded to show two fractions.



Which number sentence BEST compares these fractions?

- a) $\frac{1}{1} > \frac{5}{5}$
 b) $\frac{1}{1} < \frac{5}{5}$
 c) $\frac{1}{6} > \frac{5}{6}$
 d) $\frac{1}{6} < \frac{5}{6}$

59) Cassie and her mother are baking muffins. The muffin pan is shown below.

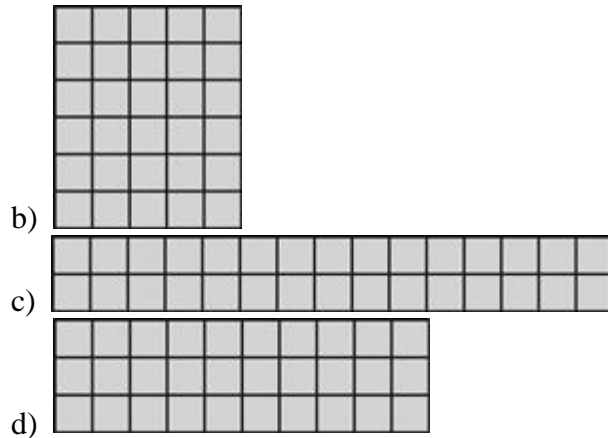


What is the BEST way to figure out how many muffins Cassie and her mother can bake in the pan?

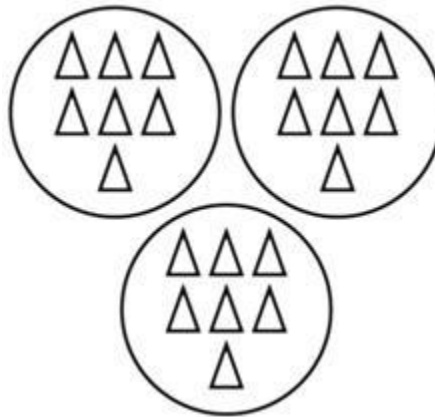
- a) $4 + 3$
 b) 4×3
 c) $4 + 4$
 d) 4×4

60) Which of the models BEST represents 15×2 ?

- a) 



61) Which equation matches the illustration?



- a) $21 - 14 = 7$
 b) $21 + 7 = 28$
 c) $21 \div 3 = 7$
 d) $21 - 7 = 14$

62) Trey has 27 buttons in 3 cups with the same number of buttons in each cup. Which number sentence could be used to find the number of buttons in each cup?

- a) $27 + 3 = \square$
 b) $27 - 3 = \square$
 c) $27 \times 3 = \square$
 d) $27 \div 3 = \square$

63) Mr. Jones will put the chickens shown below in 5 equal groups.



How many chickens will be in each group?

- a) 4
 - b) 5
 - c) 9
 - d) 20
- 64) **Mr. Jenkins is buying gloves for his children. The gloves are \$6 per pair. If he has \$36 to spend, how many pairs of gloves can he buy?**
- a) 4
 - b) 8
 - c) 6
 - d) 10
- 65) **Which number goes in the box to make the number sentence true?**

$$45 \div \square = 5$$

- a) 5
 - b) 9
 - c) 40
 - d) 50
- 66) **Which number is multiplied by 7 to get a product of 7?**
- a) 0
 - b) 1
 - c) 2
 - d) 7
- 67) **Mrs. Becker wrote the following problem on the board.**

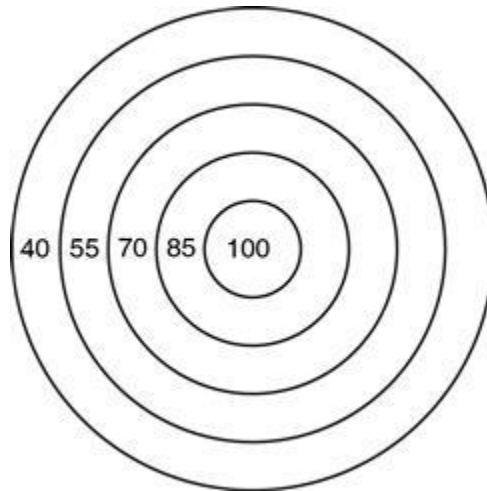
$$36 \div \square = 9$$

Which method could be used to find the missing number?

- a) subtract 9 from 36
 - b) add 36 and 9
 - c) multiply 36 times 9
 - d) divide 36 by 9
- 68) **Barry wrote the following equations: $3 \times 9 = 27$, $9 \times 3 = 27$, $27 \div 3 = 9$**

Which equation goes with his set?

- a) $27 \div 9 = 3$
 - b) $27 - 9 = 18$
 - c) $27 + 9 = 36$
 - d) $27 \times 9 = 243$
- 69) Jack had 67 toy cars in his collection. His friend Roberto gave him 15 toy cars. Jack then gave 8 toy cars to Eddie. How can Jack find the number of toy cars he has now?
- a) $67 + 15 - 8$
 - b) $67 - 15 - 8$
 - c) $67 + 15 + 8$
 - d) $67 - 15 + 8$
- 70) The numbers on the target form a pattern from the center circle to the outer circle.



Which rule is followed to make the pattern shown?

- a) add 15
- b) add 25
- c) subtract 15
- d) subtract 25