

Objective 1.1

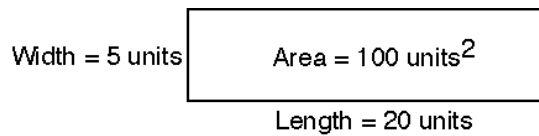
1. John has two fewer marbles than Kay. If Kay has \triangle marbles, how many marbles does John have?
- A $2 - \triangle$
- B $\triangle - 2$
- C $\triangle \div 2$
- D $2 \div \triangle$
2. What is \square if $\square + 17 = 26$?
- A 43
- B 19
- C 11
- D 9
3. All the cakes at the bake sale were sold for the same price. A total of \$75 was collected from sales of cakes. Let n represent the number of cakes sold. Which expression can be used to find the price of each cake?
- A $75 \times n$
- B $75 + n$
- C $75 \div n$
- D $75 - n$
4. What could be the rule for the pattern in the table?

n	1	2	3	4	5
Rule	3	5	7	9	11

- A $2 \times n + 1$
- B $3 \times n$
- C $4 \times n - 1$
- D $n + 2$

Objective 1.2

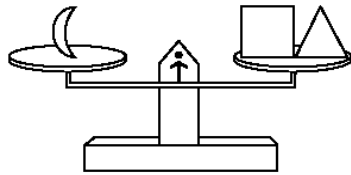
5. A rectangle has an area of 100 square units.



If the length is divided by 2, what must happen to the width for the area to remain the same?

- A** The width must be increased by 50 units.
- B** The width must be decreased by 50 units.
- C** The width must be multiplied by 2.
- D** The width must be divided by 2.

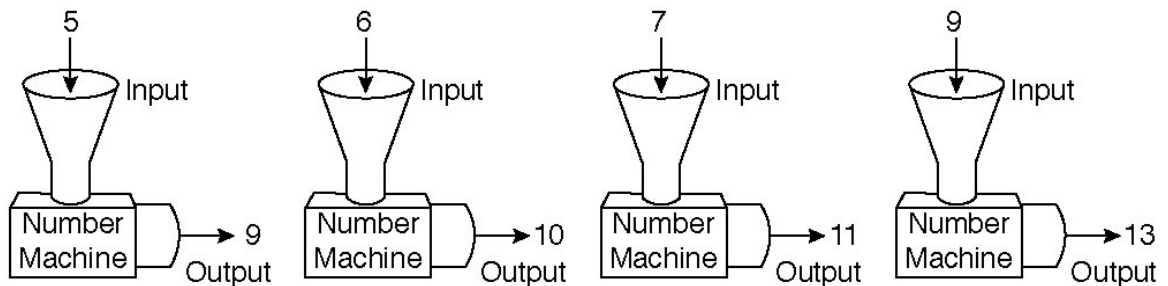
6. The scale below is balanced.



Based on that fact, which of these must be true?

- A** $\triangle = \text{crescent} - \square$
- B** $\triangle = \text{crescent} \div \square$
- C** $\triangle = \text{crescent} \times \square$
- D** $\triangle = \text{crescent} + \square$

7. Lauren put numbers into a number machine. The machine used the same rule each time to create the output numbers shown below.



If n represents the input number, which expression represents the rule the machine used to create each output number?

- A $n - 4$
 - B $n \times 4$
 - C $n \div 4$
 - D $n + 4$
8. Randi has a puppy that is six months old. She has recorded the puppy's length in inches each month since it was one month old.

Puppy Data

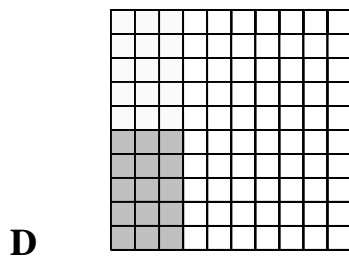
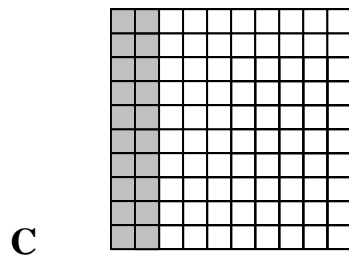
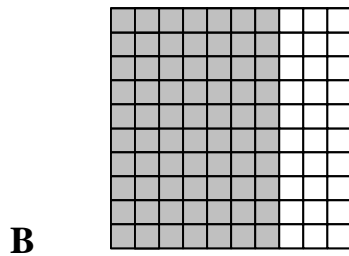
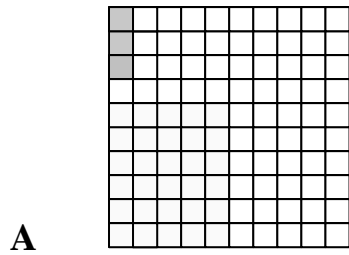
Month	January	February	March	April	May	June
Length (in inches)	14	18	19	22	25	28

Between which months did Randi's puppy grow the slowest?

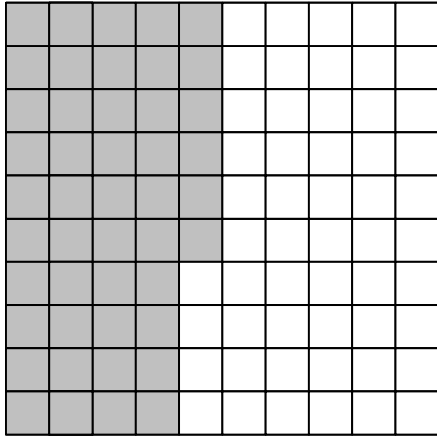
- A February and March
- B March and April
- C April and May
- D May and June

Objective 2.1a

9. Which 10 x 10 grid could be used to represent a decimal number equivalent to 0.030?

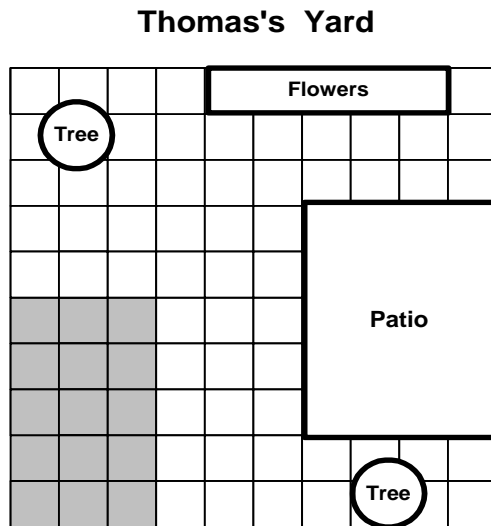


10. Which decimal number could represent the shaded region of the 10 x 10 grid below?



- A 46.000
- B 4.600
- C 0.460
- D 0.046

11. Thomas drew a grid of his yard. The shaded squares represent the area for the new vegetable garden.



According to the information shown in the grid, which decimal number is closest to the part of Thomas's yard that will be the new vegetable garden?

- A 0.015
- B 0.150
- C 1.500
- D 15.000

Objective 2.1b

12. Jim bought $\frac{3}{4}$ pound of rice. Which decimal is equivalent to the amount of rice he bought?

- A 0.13
- B 0.25
- C 0.34
- D 0.75

13. A cookie recipe calls for $\frac{1}{2}$ cup of sugar. Which fraction is equivalent to that amount of sugar?

- A** $\frac{2}{3}$
- B** $\frac{3}{5}$
- C** $\frac{4}{8}$
- D** $\frac{6}{10}$

14. Which set of numbers is listed from least to greatest?

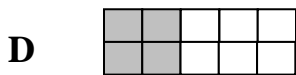
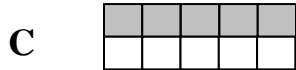
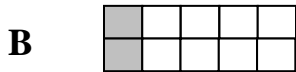
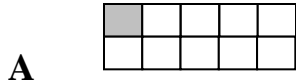
- A** $\{0.5, 0.75, \frac{1}{4}\}$
- B** $\{0.75, 0.5, \frac{1}{4}\}$
- C** $\{\frac{1}{4}, 0.5, 0.75\}$
- D** $\{\frac{1}{4}, 0.75, 0.5\}$

Objective 2.1c

15. During a hailstorm, $\frac{1}{4}$ of the cars parked on a lot were dented. Which percent is equivalent to the fraction of cars that were dented?

- A** 14%
- B** 20%
- C** 25%
- D** 41%

- 16. Each picture below represents one whole.
Which picture shows 0.20 shaded?**



- 17. Mr. Thomas said that 30% of his students
received a grade of A on the math test.
Which decimal number is equivalent to 30%?**

- A** 0.03
- B** 0.30
- C** 0.33
- D** 3.00

Objective 2.1d

- 18. Three friends were playing a game of marbles.
At the end of the game, Marcy had 25% of the
marbles, Roger had $\frac{1}{2}$ of the marbles, and Ann
had the rest of the marbles. If there were 100
marbles altogether, how many marbles did Ann
have at the end of the game?**

- A** 20
- B** 25
- C** 30
- D** 50

19. Kerry went to the store and saw a sign that said, “Shirts are 25% off the regular price!” What is another way to say what the sign said?

- A Shirts are $\frac{1}{2}$ off the regular price.
- B Shirts are $\frac{1}{3}$ off the regular price.
- C Shirts are $\frac{1}{4}$ off the regular price.
- D Shirts are $\frac{3}{4}$ off the regular price.

Objective 2.2a

20. Which of the following is a way to compute 12×34 ?

- A $(10 \times 34) + (2 \times 34)$
- B $(12 \times 30) + (10 \times 4)$
- C $(10 \times 30) + (2 \times 4)$
- D $(10 \times 2) + (30 \times 4)$

21. The workers at Mr. Blanca’s shop earn \$7 per hour and work 20 hours per week. Let n represent the number of workers. Mr. Blanca uses the following expression to find the total weekly payroll at the shop.

$$7 \times (20 \times n)$$

Which expression can also be used to find the total weekly pay at the shop?

- A $7 \times (20 \div n)$
- B $(7 \times 20) \times n$
- C $20 \times (n + 7)$
- D $(n + 20) \times 7$

Objective 2.2b

22. Which of the following numbers is composite?

- A 11
- B 31
- C 41
- D 81

23. Which of the following is a factor of 51?

- A 2
- B 3
- C 4
- D 5

Objective 3.1a

24. In math class, José went to the board and wrote down $1 - 0.37$. He said, “I used this method at the store to compute how much change I should get after buying a pack of gum that cost \$0.37. I gave the cashier \$1.” Which is closest to the actual amount of change José should have received?

- A \$0.40
- B \$0.50
- C \$0.60
- D \$0.70

25. Karen estimated how much change she would get if she gave a clerk \$20.00 for items that total \$16.71. Which is closest to the exact amount of change Karen should have received?

- A \$2
- B \$3
- C \$4
- D \$5

26. Jimmy is selling cookies to raise money for his baseball team. Each box he sells raises \$3.95 for the team. If Jimmy wants to raise \$160.00, which is closest to the number of boxes he will have to sell?

- A 30**
- B 40**
- C 50**
- D 60**

27. Francine made 11 long distance calls in March. The calls ranged from 11 minutes to 25 minutes in length. If Francine pays \$0.09 per minute for long distance calls, which is the closest to the total cost of her calls?

- A \$2**
- B \$11**
- C \$18**
- D \$25**

Objective 3.1b

28. David discovered that $\frac{1}{4}$ of the 432 members of his book club bought the December book selection. Which is closest to the number of members who bought the December book selection?

- A 25**
- B 7**
- C 100**
- D 300**

Objective 3.2a

- 29. During a science activity, Elizabeth correctly found the weight of two pecans as 5.3 grams and 0.17 grams. Which answer is the total weight in grams?**

A 3.60 g
B 5.13 g
C 5.47 g
D 7.00 g

Objective 3.2b

- 30. Cece drew a rectangle that was 3.4 centimeters wide and 7.1 centimeters long. To find the area of the rectangle she, used the formula below.**

Area = length \times width

Find the area of Cece's rectangle.

A 3.7 cm²
B 10.5 cm²
C 21 cm²
D 24.14 cm²

- 31. Miranda distributed 176 pieces of candy equally among 16 friends. How many pieces did each friend receive?**

A 9
B 10
C 11
D 12

32. Sean planned to cut a 120 centimeter length of string into 2.4 centimeter lengths. Find the greatest number of 2.4 centimeter lengths Sean can cut.

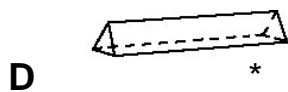
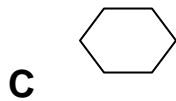
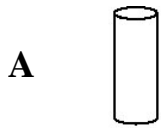
- A 5
- B 50
- C 0.5
- D 0.05

Objective 4.1

33. Which name best describes a quadrilateral with exactly one pair of parallel sides?

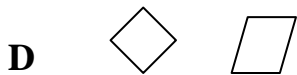
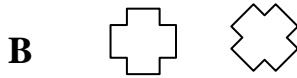
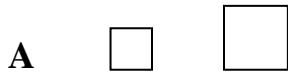
- A square
- B rhombus
- C rectangle
- D trapezoid

34. Which figure has six vertices and five faces?



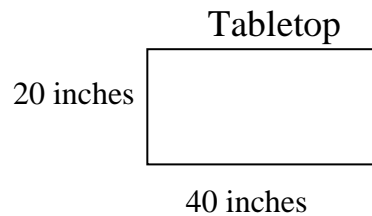
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35. Which one of the following pairs of shapes is congruent?



Objective 4.2

36. Kim is using 1-inch-square tiles to cover the top of a rectangular table.



How many tiles are needed to completely cover the tabletop?

- A** 60
- B** 120
- C** 400
- D** 800

37. Wade built a fence around a rectangular section of his backyard. The length of the fence is 20 feet and the width is 5 feet. Find the perimeter of the fenced section.

- A** 10 ft
- B** 40 ft
- C** 50 ft
- D** 100 ft

38. An architect drew a rectangle on part of a house plan. The length of the rectangle is 12 centimeters and the width is 8 centimeters. What is the area of the rectangle?

- A 20 cm^2
- B 40 cm^2
- C 96 cm^2
- D 106 cm^2

Objective 4.5

39. John made $6\frac{1}{2}$ quarts of lemonade for the parent meeting. How many pints of lemonade did he make?

- A 6.5
- B 13
- C 19.5
- D 26

40. Kailee ran 5,000 centimeters from school to the bus stop. How many meters did she run?

- A 5
- B 50
- C 5000
- D 500,000

41. A dip recipe calls for 1 cup of sour cream. Jan plans to make five recipes of dip for the party. Sour cream is sold in 1 pint containers. How many containers should she buy?

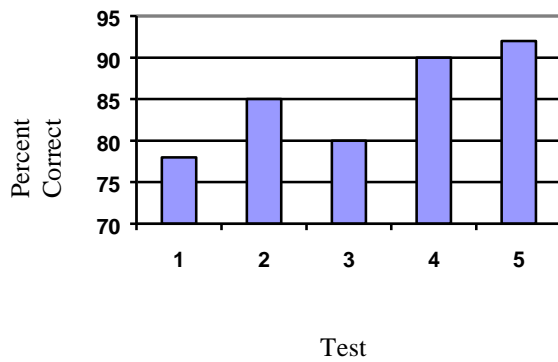
- A 5
- B 4
- C 3
- D 2

Objective 5.1a

42. Which of the following graphs best displays the information in the table?

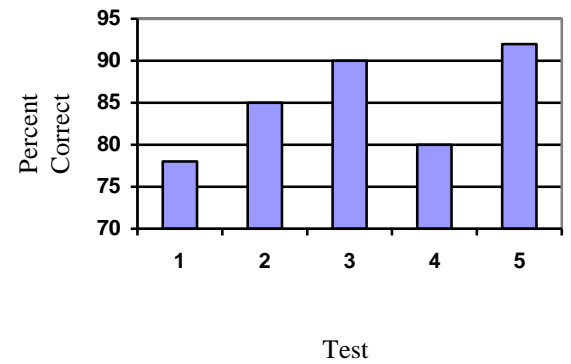
Test	Percent of Correct Answers
1	78%
2	85%
3	80%
4	90%
5	92%

A
Scores



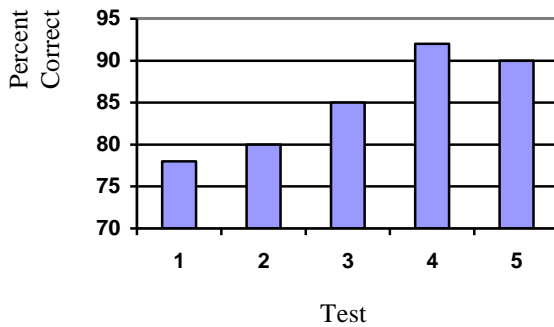
C

Billy's



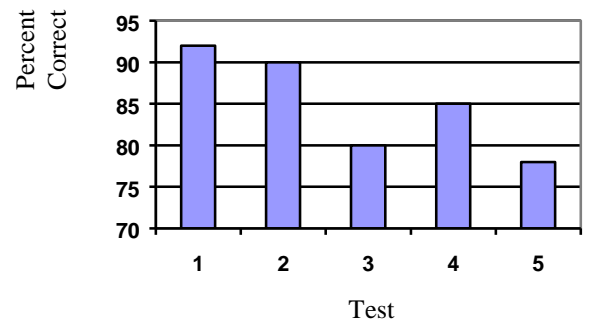
B
Scores

Billy's Scores



D

Billy's



Objective 5.1b

43. Sam wants to make a graph that shows his current height, along with that of his brothers and sisters. Which would be the best type of graph to use?

- A** bar graph
- B** line graph
- C** picture graph
- D** circle graph

44. Which type of graph would best display the data shown in the chart below?

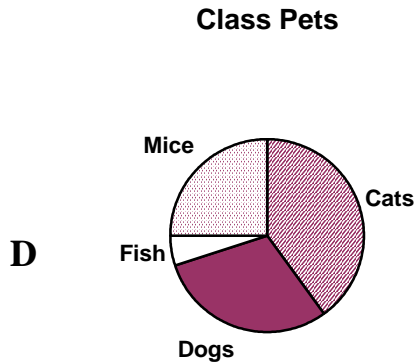
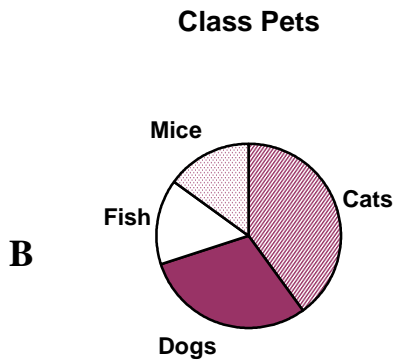
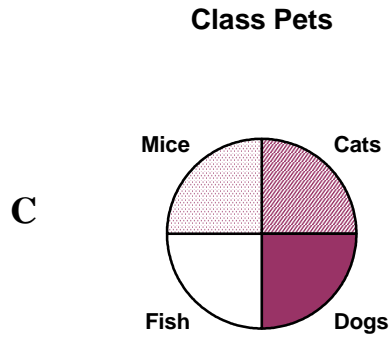
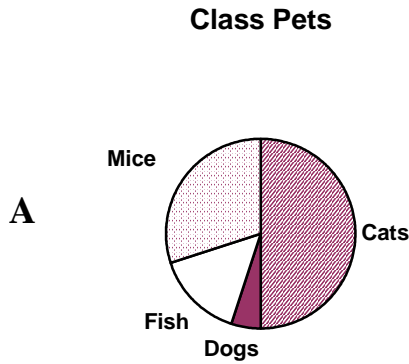
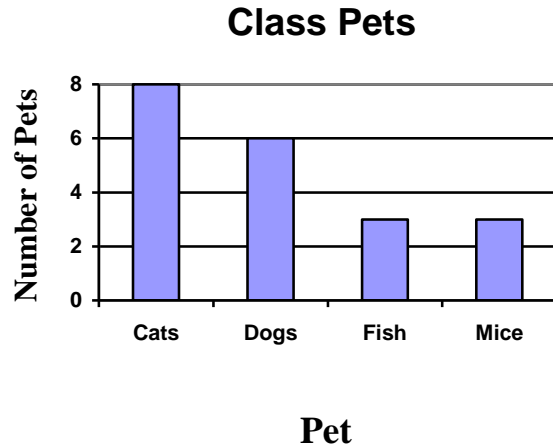
Favorite Sports

Sport	Percent of 5th Graders
Baseball	23%
Basketball	20%
Football	40%
Soccer	17%

- A** bar graph
- B** circle graph
- C** line graph
- D** picture graph

Objective 5.1c

45. Stan wants to change the bar graph of the class pets to a circle graph. Which circle graph best shows the information in the bar graph?

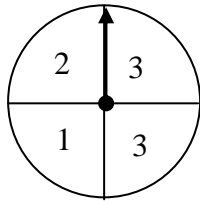


Objective 5.2a

46. Jean rolls a fair, 6-sided number cube with the numbers one through six on it. How likely is it that she will roll a number greater than six?

- A 1
- B $\frac{2}{3}$
- C $\frac{1}{3}$
- D 0

47. If the pointer is spun 12 times, what will most likely happen?



- A The spinner will point to 1 the most often.
- B The spinner will point to 1 the least often.
- C The spinner will point to 3 the most often.
- D The spinner will point to 3 the least often.

48. Mr. Jones wanted to find the probability of arriving at a stoplight when it is yellow. He kept track of the first stoplight he would arrive at in the morning. The light was red 10 times, yellow 5 times, and green 15 times. According to his results, what is the probability when he reaches the first stoplight in the morning that it will be yellow?

- A $\frac{1}{2}$
- B $\frac{1}{3}$
- C $\frac{1}{4}$
- D $\frac{1}{6}$

Answer sheet

1. B
2. D
3. C
4. A
5. C
6. A
7. D
8. A
9. A
10. C
11. B
12. D
13. C
14. C
15. C
16. B
17. B
18. B
19. C
20. A
21. B
22. D
23. B
24. C
25. B
26. B
27. C
28. C
29. C
30. D
31. C
32. B
33. D
34. D
35. B
36. D
37. C
38. C
39. B
40. B
41. C
42. A
43. A
44. B
45. B
46. D
47. C
48. D

