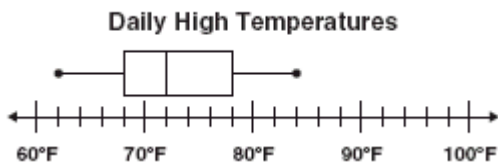


Standards Test

1 Which operation will change the value of any nonzero number?

- A. Adding zero
- B. Multiplying by zero
- C. Multiplying by one
- D. Dividing by one

2 The box-and-whisker plot represents the daily high temperature at a beach in April.



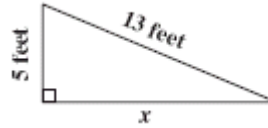
What is the median daily high temperature?

- A. $68^{\circ}F$
- B. $72^{\circ}F$
- C. $78^{\circ}F$
- D. $84^{\circ}F$

3 Juanita exercised for one hour. How many seconds did Juanita exercise?

- A. 60
- B. 120
- C. 360
- D. 3,600

4 What is the value of x in the right triangle shown below?



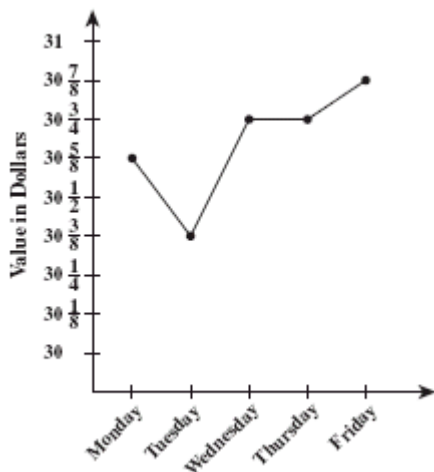
- A. 8 feet
- B. 12 feet
- C. 18 feet
- D. 23 feet

5 A shopkeeper has x kilograms of tea in stock. He sells 15 kilograms and then receives a new shipment weighing $2y$ kilograms. Which expression represents the weight of the tea he now has?

- A. $x - 15 - 2y$
- B. $x + 15 + 2y$
- C. $x + 15 - 2y$
- D. $x - 15 + 2y$

Standards Test

- 6** The graph below represents the closing price of a share of a certain stock for each day of a week?



Which day had the greatest increase in the value of this stock over that of the previous day?

- A. Tuesday
- B. Wednesday
- C. Thursday
- D. Friday

- 7** Which fraction is the same as 3.08?

- A. $\frac{56}{25}$
- B. $\frac{77}{25}$
- C. $\frac{19}{5}$
- D. $\frac{32}{5}$

8 $(3^8)^2 =$

- A. 3^4
- B. 3^6
- C. 3^{10}
- D. 3^{16}

- 9** Jana bought a car for \$4200 and later sold it for a 30% profit. How much did Jana sell the car for?

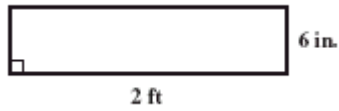
- A. \$1260
- B. \$2940
- C. \$5460
- D. \$7140

- 10** A bucket contains 3 bottles of apple juice, 2 bottles of orange juice, 6 bottles of tomato juice, and 8 bottles of water. If Kira randomly selects a bottle, what is the probability that she will select a drink other than water?

- A. $\frac{3}{4}$
- B. $\frac{11}{19}$
- C. $\frac{8}{19}$
- D. $\frac{1}{4}$

Standards Test

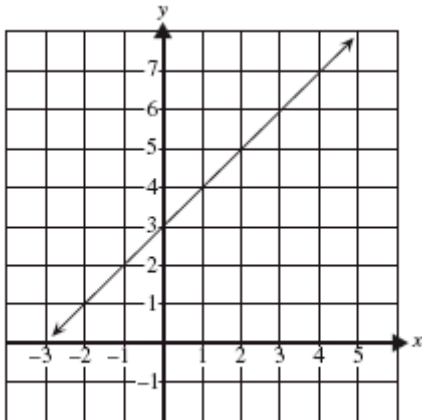
- 11 The width of the rectangle shown below is 6 inches (in.). The length is 2 feet (ft).



What is the area of the rectangle in square inches?

- A. 12
- B. 16
- C. 60
- D. 144

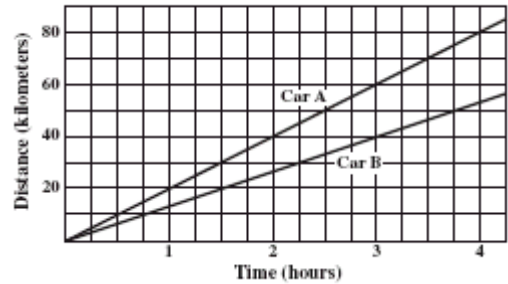
- 12 What is the equation of the graph shown below?



- A. $y = x - 1$
- B. $y = x + 1$
- C. $y = x + 3$
- D. $y = x - 3$

- 13 John uses $\frac{2}{3}$ of a cup of oats per serving to make oatmeal. How many cups of oats does he need to make 6 servings?

- A. $2\frac{2}{3}$
- B. 4
- C. $5\frac{1}{3}$
- D. 9



- 14 After three hours of travel, Car A is about how many kilometers ahead of Car B?

- A. 2
- B. 10
- C. 20
- D. 25

Standards Test

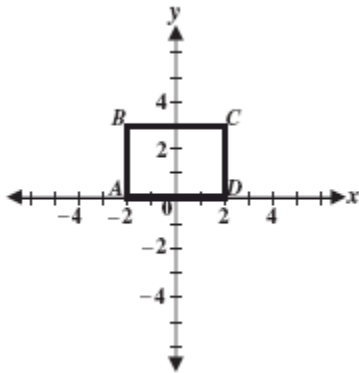
15

The cost of an afternoon movie ticket last year was \$4.00. This year an afternoon movie ticket cost \$5.00. What is the percent increase of the ticket from last year to this year?

- A. 10%
- B. 20%
- C. 25%
- D. 40%

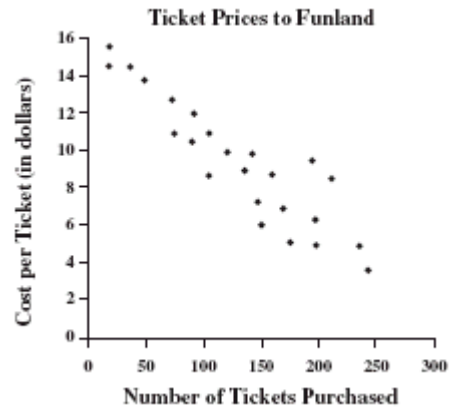
16

The graph of rectangle $ABCD$ is shown below.



What is the area, in square units, of rectangle $ABCD$?

- A. 6
- B. 10
- C. 12
- D. 14



17

The cost of a ticket to Funland varies according to the season. Which of the following conclusions about the number of tickets purchased and the cost per ticket is best supported by the scatter plot above?

- A. The cost per ticket increases as the number of tickets purchased increases.
- B. The cost per ticket is unchanged as the number of tickets purchased increases.
- C. The cost per ticket decreases as the number of tickets purchased increases.
- D. There is no relationship between the cost per ticket and the number of tickets purchased.

Standards Test

18 The square root of 150 is between

- A. 10 and 11.
- B. 11 and 12.
- C. 12 and 13.
- D. 13 and 14.

19 Which expression is the same as $3x - 3y$?

- A. $3xy$
- B. $3(x - y)$
- C. $3x - y$
- D. $x - 3y$

20 If $h = 3$ and $k = 4$, then

$$\frac{hk + 4}{2} - 2 =$$

- A. 6
- B. 7
- C. 8
- D. 10

21 The five members of a band are getting new outfits. Shirts cost \$12 each, pants cost \$29 each and boots cost \$49 a pair. What is the total cost of the new outfits for all of the members?

- A. \$90
- B. \$95
- C. \$450
- D. \$500

22 Robert's toy car travels at 40 centimeters per second (cm/sec) at high speed and 15 cm/sec at low speed. If the car travels for 15 seconds at high speed and then 30 seconds at low speed, what distance would the car have traveled?

- A. 1050 cm
- B. 1200 cm
- C. 1425 cm
- D. 2475 cm

23 Simplify the expression shown below.

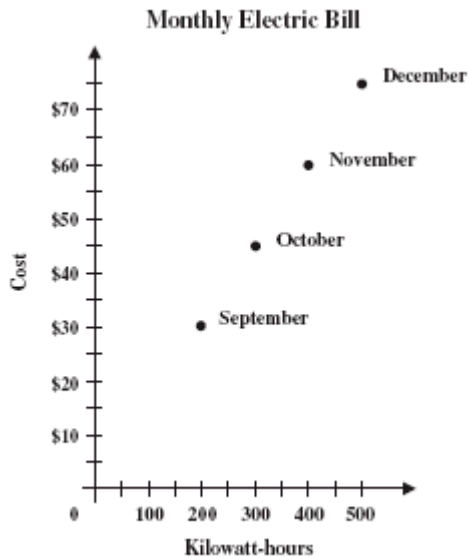
$$(5x^2z^2)(8xz^3)$$

- A. $40x^2z^6$
- B. $40x^3z^5$
- C. $40x^3z^6$
- D. $40x^5z^5$

Standards Test

24

The graph below shows Francine's electric bill for 4 different months. What is the price per kilowatt-hour of Francine's electricity?



- A. \$0.15
- B. \$0.30
- C. \$1.50
- D. \$6.67

25

Solve for x .

$$2x - 3 = 7$$

- A. -5
- B. -2
- C. 2
- D. 5

26

What does x^5 equal when $x = -2$?

- A. -32
- B. -10
- C. $-\frac{1}{32}$
- D. 32

27

What is $\frac{3}{4} - \frac{1}{6}$?

- A. $\frac{1}{6}$
- B. $\frac{1}{3}$
- C. $\frac{7}{12}$
- D. $\frac{11}{12}$

28

Rico's first three test scores in biology were 65, 90, and 73. What is his mean score?

- A. 65
- B. 73
- C. 76
- D. 90

Standards Test

29

To get home from work, Curtis must get on one of three highways that leave the city. He then has a choice of four different roads that lead to his house. In the diagram below, each letter represents a highway, and each number represents a road.

		Highway		
		A	B	C
Road	1	A 1	B 1	C 1
	2	A 2	B 2	C 2
	3	A 3	B 3	C 3
	4	A 4	B 4	C 4

If Curtis randomly chooses a route to travel home, what is the probability that he will travel Highway B and road 4?

- A. $\frac{1}{16}$
- B. $\frac{1}{12}$
- C. $\frac{1}{4}$
- D. $\frac{1}{3}$

30

Marcus can type about 42 words per minute. If he types at this rate for 30 minutes without stopping, about how many words will he type?

- A. 1260
 - B. 2100
 - C. 2520
 - D. 4200
-

31

Some students attend school 180 of the 365 days in a year. About what part of the year do they attend school?

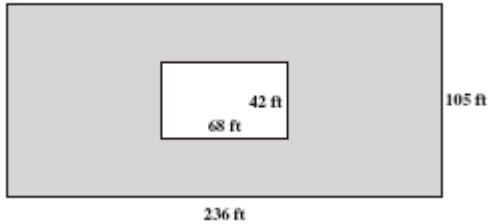
- A. 18%
 - B. 50%
 - C. 75%
 - D. 180%
-

32

3.6×10^2

- A. 3.600
- B. 36
- C. 360
- D. 3,600

Standards Test



- 33** A rectangular pool 42 feet by 68 feet is on a rectangular lot 105 feet by 236 feet. The rest of the lot is grass. Approximately how many square feet is grass?

- A. 2,100
- B. 2,800
- C. 21,000
- D. 28,000

- 34** Which fraction is equivalent to

$$\frac{5}{6} + \frac{7}{8} ?$$

- A. $\frac{35}{48}$
- B. $\frac{6}{7}$
- C. $\frac{20}{21}$
- D. $\frac{41}{24}$

- 35** Which number equals $(2)^{-4}$?

- A. -8
- B. $-\frac{1}{16}$
- C. $\frac{1}{16}$
- D. $\frac{1}{8}$

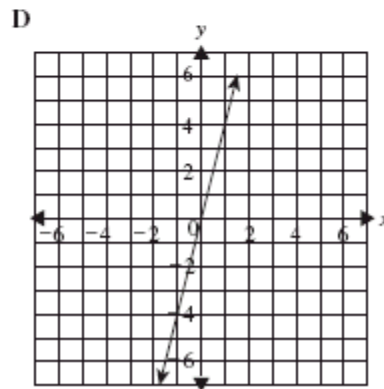
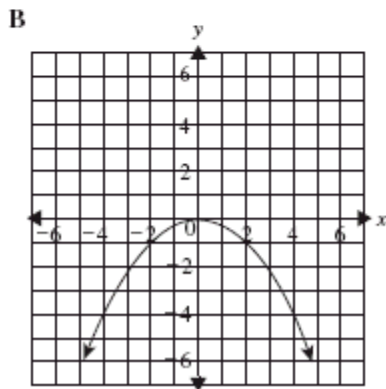
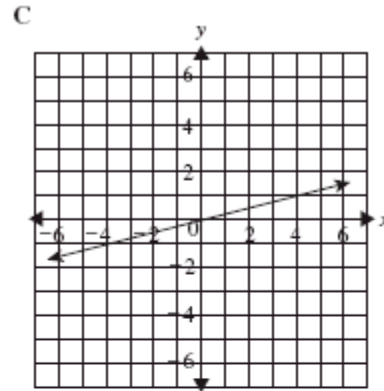
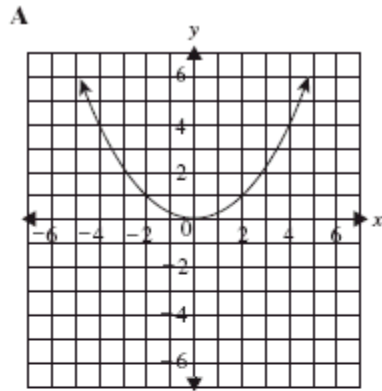
- 36** Chris drove 100 kilometers from San Francisco to Santa Cruz in 2 hours and 30 minutes. What computation will give Chris' average speed in kilometers per hour?

- A. Divide 100 by 2.5.
- B. Divide 100 by 2.3.
- C. Multiply 100 by 2.5.
- D. Multiply 100 by 2.3.

Standards Test

37

Which of the following is the graph of $y = \frac{1}{4}x^2$?



Standards Test

Question Number	Correct Answer
1	B
2	B
3	D
4	B
5	D
6	B
7	B
8	D
9	C
10	B
11	D
12	C
13	B
14	C
15	C
16	C
17	C
18	C
19	B
20	A
21	C
22	A
23	B
24	A
25	D
26	A
27	C
28	C
29	B
30	A
31	B
32	C
33	C
34	D
35	C
36	A
37	A