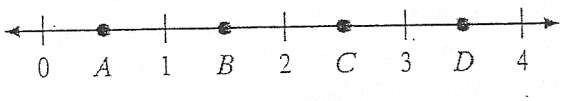
16) Which point shows the location of $\frac{3}{2}$ on the number line?



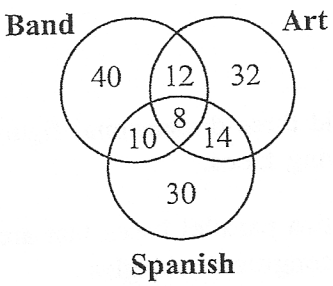
A point A

B point B

C point C

D point D

17) The Venn diagram below shows the number of seventh-grade students at Berkshire Middle School enrolled in Band, Art, Spanish, or any combination of the three elective classes.



What is the total number of seventh-grade students at Berkshire Middle School who are enrolled in both Art and Spanish, but not in Band?

A. 106

B. 76

C. 22

D. 14

18) What is the value of the expression below?

$$|-16| - |8|$$

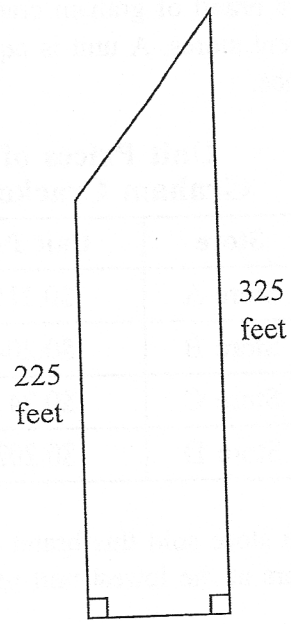
A. −24

B. −8

C. 8

D. 24

19) A new house was built on a lot in the shape of a trapezoid, as shown below.



What is the area of the trapezoid?

A. 16,875 square feet

B. 17,200 square feet

C. 20,625 square feet

D. 24,375 square feet

20) A sporting goods store charges different prices for sewing uppercase letters and lowercase letters on a jacket. The expression below shows the cost, in dollars, for sewing x uppercase letters and y lowercase letters.

$$1.5x + 0.75y$$

What is the cost for sewing 2 uppercase letters and 10 lowercase letters on a jacket?

A. $3.75

B. $4.50

C. $10.50

D. $16.50

21) The interior of a picnic cooler is in the shape of a rectangular prism.

- It has a width of 6 inches.
- It has a length of 8 inches.
- It has a volume of 336 cubic inches.

What is the height of the interior of the picnic cooler?

A. 4 inches
B. 6 inches
C. 7 inches
D. 8 inches

23) Ramon is going to walk, jog, and run a total distance of 30 miles for charity. He plans to walk $\frac{1}{2}$ of the total distance, jog $\frac{1}{3}$ of the total distance, and run the remaining distance. What is the distance that Ramon plans to run?

A. 5 miles
B. 10 miles
C. 12 miles
D. 18 miles

22) A radio station awarded prizes to the top three winners of a contest.

- The first-place prize was $2000.
- The second-place prize was 30% less than the first-place prize.
- The third-place prize was 30% less than the second-place prize.

Which table shows the three prize amounts in the radio contest?

A.

Radio Station Contest Prizes

Contest Place	Prize Amount
first	$2000
second	$1970
third	$1940

B.

Radio Station Contest Prizes

Contest Place	Prize Amount
first	$2000
second	$1700
third	$1400

C.

Radio Station Contest Prizes

Contest Place	Prize Amount
first	$2000
second	$1400
third	$ 980

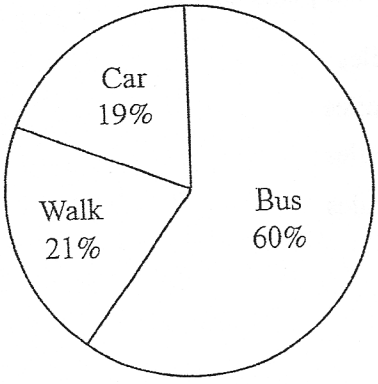
D.

Radio Station Contest Prizes

Contest Place	Prize Amount
first	$2000
second	$1400
third	$ 800

24) The principal of Washington Middle School surveyed students to determine how they got home from school on Monday. The graph below shows the results of this survey.

Students' Transportation from School on Monday



Of the students surveyed, 63 students said they walked home from school on Monday. What was the total number of students surveyed?

A. 63

B. 189

C. 210

D. 300

25) Mary's chores include taking out the trash every third day and washing the dishes every fourth day. She took out the trash **and** washed the dishes on February 7.

Based on Mary's schedule for doing chores, what is the next date that she will do both chores on the same day?

A. February 10

B. February 12

C. February 14

D. February 19

26) There were 48 questions on Zach's last mathematics test. He answered 5 of the 48 questions incorrectly.

Which of the following is closest to the percent of questions Zach answered **correctly** on that test?

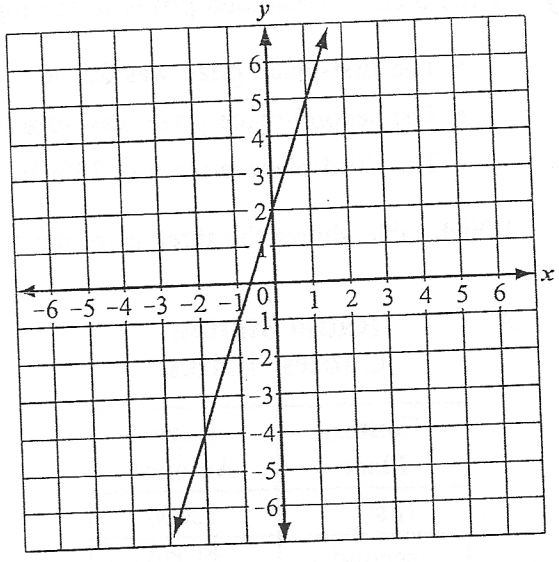
A. 50%

B. 55%

C. 90%

D. 95%

27) The graph below shows a relationship between values of x and y.



As the value of x increases from 0 to 1, what is the change in the value of y?

A. The value of y increases by 3.

B. The value of y decreases by 3.

C. The value of y increases by $\frac{1}{3}$.

D. The value of y decreases by $\frac{1}{3}$.

28) The volleyball coach recorded the ratios of successful serves for four players, as shown in the table below.

Ratios of Successful Serves for Four Volleyball Players

Player Name	Ratio of Successful Serves
Andrea	7 out of 10
Bren	9 out of 12
Cari	12 out of 18
Diana	13 out of 20

Which player had the greatest ratio of successful serves?

A. Andrea
B. Bren
C. Cari
D. Diana

29) Ms. Robbins gave rulers to $\frac{1}{4}$ of the 24 students in her class. Which of the following expressions can be used to find $\frac{1}{4}$ of 24?

A. $4 \div 24$

B. $24 \div 4$

C. $\frac{1}{4} \div 24$

D. $24 \div \frac{1}{4}$

30) Amy used $2\frac{1}{2}$ cans of chicken broth to make soup. Each can contained $7\frac{1}{2}$ ounces of broth.

What was the total number of ounces of chicken broth that Amy used?

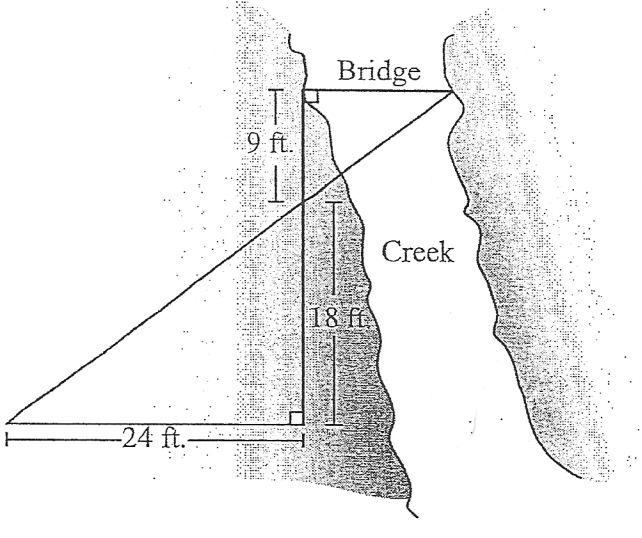
A. 10 ounces

B. $14\frac{1}{4}$ ounces

C. 18 ounces

D. $18\frac{3}{4}$ ounces

31) Mr. Lui wants to build a bridge across the creek that runs through his property. He made measurements and drew the map shown below.



Based on this map, what is the distance across the creek at the place where Mr. Lui wants to put the bridge?

A. 9 feet
B. 12 feet
C. 18 feet
D. 24 feet

32) Which list of numbers is ordered from *least* to *greatest*?

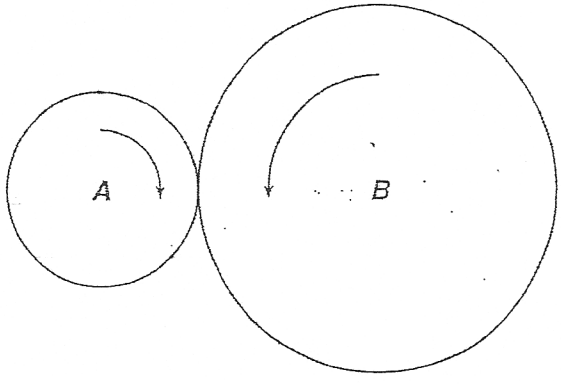
A $\frac{1}{2}, 2\frac{1}{2}, 0.2, 0.02$

B $0.02, 0.2, 2\frac{1}{2}, \frac{1}{2}$

C $0.02, 0.2, \frac{1}{2}, 2\frac{1}{2}$

D $0.2, \frac{1}{2}, 0.02, 2\frac{1}{2}$

33) When wheel B turns 2 revolutions, wheel A turns 5 revolutions. When wheel A turns 40 revolutions, how many revolutions does wheel B turn?



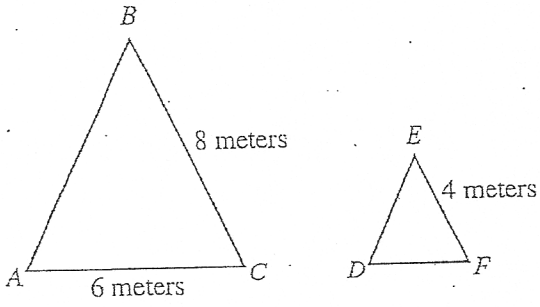
A 4

B 16

C 80

D 100

34) $\triangle ABC$ is similar to $\triangle DEF$. What is the length of $\overline{DF}$?



A 2 meters

B 3 meters

C 5 meters

D 10 meters

35) A farmer harvested 14,000 pounds of almonds from an 8-acre orchard. Which proportion could be solved to find x, the expected harvest from a 30-acre orchard?

A $\frac{8}{14,000} = \frac{x}{30}$

B $\frac{8}{14,000} = \frac{30}{x}$

C $\frac{30}{14,000} = \frac{x}{8}$

D $\frac{30}{14,000} = \frac{8}{x}$