

- A. $80\% = .8 = \frac{4}{5}$
- B. $78\% = .78 = \frac{7}{8}$
- C. $35\% = .35 = \frac{1}{3}$
- D. $55\% = .55 = \frac{11}{20}$

2) Which statement is true?

- A. $-9 < -5$ B. $-16 > -12$ C. $6 < -8$ D. $0 > 8$

3) A pair of jeans costing \$43.50 is on sale for 25% off. Of the following, which amount is closest to the sale price?

- A. \$11.88
- B. \$14.50
- C. \$25.00
- D. \$32.50

4) If 15 out of 40 students failed the test, what percent passed?

- A. 50%
- B. 62.5%
- C. 37.5%
- D. 46.7%

5) If 12.8% of $n = 1.28$, then $n = \underline{\quad}$

- A. 32
- B. 24
- C. 48
- D. none of these

6) $(\frac{-40}{-10})(5) + -4 = \underline{\quad}$

- A. 20
- B. 16
- C. 4
- D. 24

7) $-6 \cdot -2 =$

- A. 12
- B. -12
- C. -4
- D. 4

8) $2^3 + 3(2 + 7) - (8 - 4)^2$

- A. 73
- B. 19
- C. 25
- D. 17

9) What is the solution to the following equation? $64 = w - 8$

- A. $w = 8$
- B. $w = 48$
- C. $w = 72$
- D. $w = 512$

10) Don earns \$5/hour for babysitting. His total earnings for babysitting last week were \$72. Which equation below could be used to find the number of hours Don spent babysitting last week? (*let h represent the total # of hours Don spent babysitting last week*)

- A. $6 \cdot h = 72$
- B. $72 \cdot h = 5$
- C. $h = 72 + 6$
- D. $h = 72 \cdot 6$

11) The moon is approximately 250,000 miles from the earth. What is the distance written in scientific notation?

- A. 2.5×10^4
- B. 25×10^4
- C. 2.5×10^5
- D. 25×10^5

12) Tim has a piece of wood that is $16\frac{1}{2}$ inches long. If he cuts off $4\frac{3}{8}$ inches, how many inches is the remaining piece?

- A. $12\frac{1}{8}$ inches
- B. $12\frac{1}{4}$ inches
- C. $10\frac{1}{8}$ inches
- D. $12\frac{2}{6}$ inches

13) The prime factorization of 108 is:

- A. $2^3 \times 3^3$
- B. $2^2 \times 3^3$
- C. $3^3 \times 2^2$
- D. $2^3 \times 3^3$

14) What is the next number in the pattern?

1, 4, 9, 16, 25, ____

- A. 36
- B. 50
- C. 144
- D. 100

15) What is the sum of $x(y - z)$ and $x(y + z)$ when $x = 5$, $y = 4$, and $z = -1$?

- A. 10
- B. 30
- C. 50
- D. 40

16) If $5y + 5 = 30$, what is the value of y ?

- A. 3
- B. 5
- C. 7
- D. 9

17) Which set represents a set of integers?

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

B. $\{0, 2, 5\}$

C. $\{1, 2, 3.4\}$

D. $\{\frac{2}{3}, 0, 3\}$

18) $+6 + -7 - -8$ equals:

A. $+6$

B. -9

C. $+7$

D. $+9$

19) Sue is 5 years older than Traci. Together their ages equal 32. Which equation can be used to find their ages?

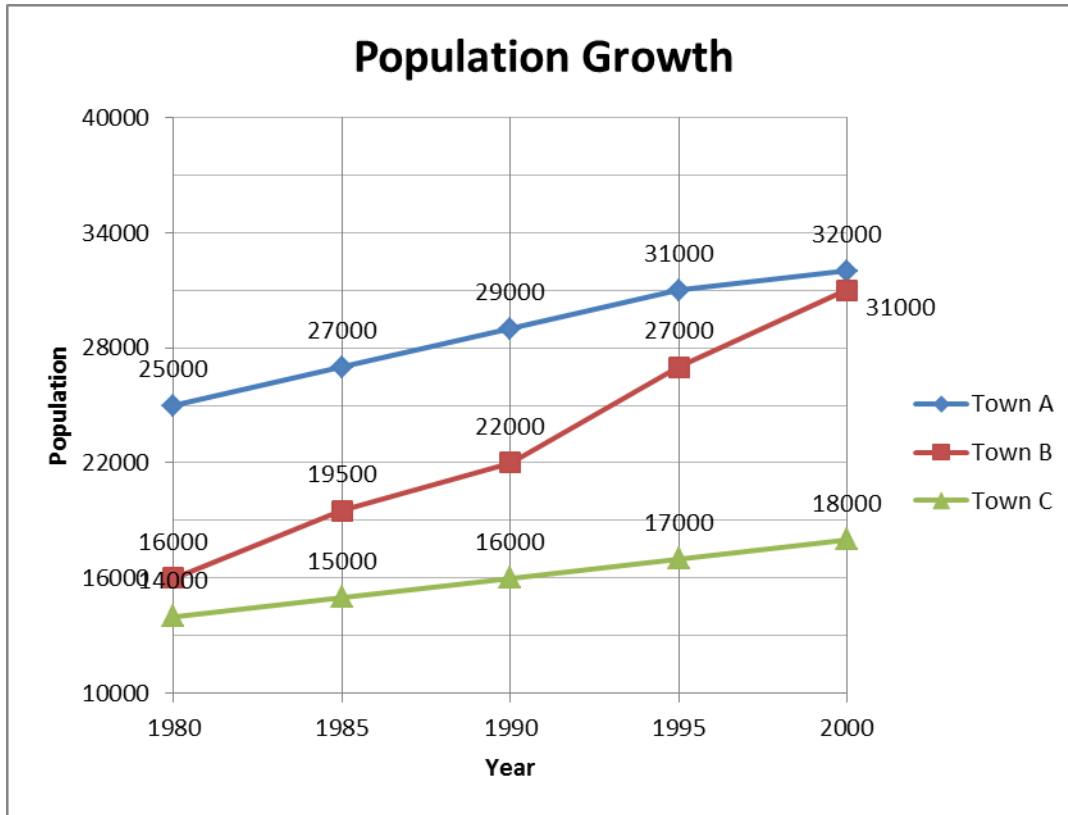
A. $t + 5 = 32$

B. $2t + 5 = 32$

C. $t - 5 = 32$

D. $5 + (t \div 2) = 32$

The graph below shows the population growth three towns.



20) Based on the graph above, which town probably has the lowest population in 2005?

- A. Town A
- B. Town C
- C. Town B
- D. Town D

21) Based on the graph from item # 20, what is the average (mean) population growth per year for Town C?

- A. 200 per year
- B. 800 per year
- C. 1000 per year
- D. 4000 per year

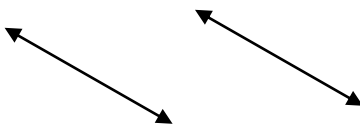

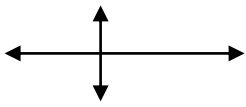
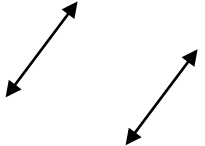
22) If t must be an integer, what is the solution set for $2t - 7 > 5$?

- A. $\{6, 5, 4, 3, \dots\}$
- B. $\{5, 4, 3, \dots\}$
- C. $\{7, 8, 9, 10, \dots\}$
- D. $\{6, 7, 8, \dots\}$

23) Which of the following sets of numbers are rational?

- A. $\sqrt{1}$, $\sqrt{2}$, $\sqrt{9}$
- B. $\sqrt{25}$, $\sqrt{50}$, $\sqrt{125}$
- C. $\sqrt{100}$, $\sqrt{400}$, $\sqrt{800}$
- D. $\sqrt{1}$, $\sqrt{25}$, 3.14

24) Which of these are intersecting lines?

- A. 
- B. 
- C. 
- D. 

25) The stem and leaf plot below shows the test scores for a group of students.

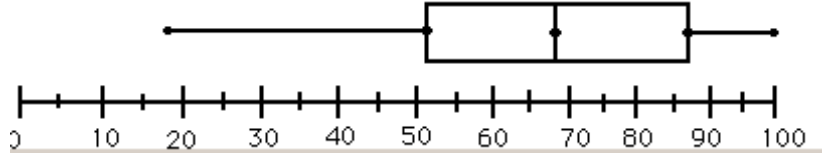
Test Scores

9	1, 2, 2, 5, 6, 7
8	3, 4, 4, 6
7	2, 5, 6, 9, 9
6	4, 7, 9, 9

How many students scored higher than 70?

- A. 6
- B. 8
- C. 10
- D. 15

26) A box-and-whisker plot has been used to represent a set of data.



Based on the box-and-whisker plot, what is the range of the set of data?

- A. Approximately 18 to 52
- B. Approximately 52 to 86
- C. Approximately 18 to 100
- D. Approximately 52 to 100

27) What is the volume of a rectangular prism with a length of 10 inches, width of 12 inches, and height of 6 inches?

- A. 28 in.³
- B. 72 in.³
- C. 82 in.³
- D. 720 in.³

28) Given cards labeled

P

E

A

C

E

, what is the probability of drawing a C, which is not replaced, and then drawing a vowel?

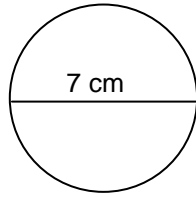
- A. $\frac{3}{20}$
- B. $\frac{3}{25}$
- C. $\frac{4}{20}$
- D. $\frac{4}{25}$

29) 6! is equal to:

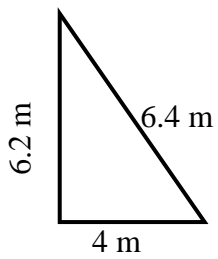
- A. 6
- B. 20
- C. 30
- D. 720

30) Which of the following is closest to the area of the circle below?

- A. 14 cm^2
- B. 38 cm^2
- C. 49 cm^2
- D. 154 cm^2



31) Find the area of the triangle below.



- A) 16.6 m
- B) 24.8 m^2
- C) 12.4 m^2
- D) 158.72 m^2

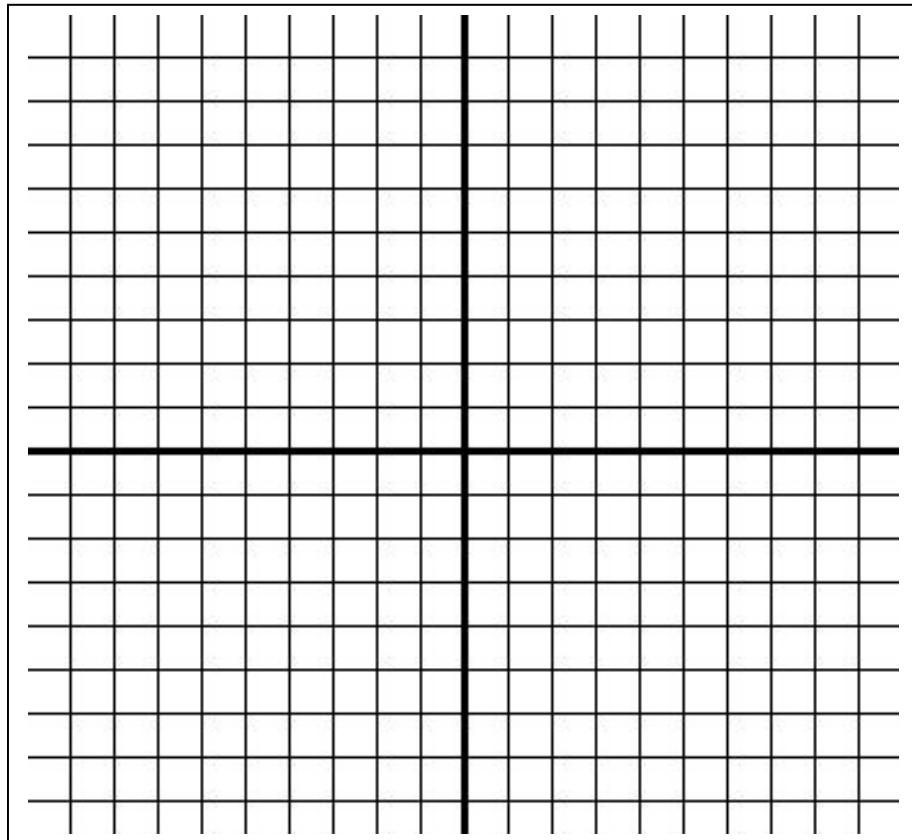
32) Use the following equation to answer each part of question 32.

$$y = -3x + 2$$

A. One point that lies on the line is shown in the table below. Find 2 more points that are on the line and list them in the table.

x	y
1	-1

B. On the grid below, label the x- and y- axis.



C. Graph the line $y = -3x + 2$ on the coordinate plane above.