

11. What is the slope of the line through $(-2,1)$ and $(2,-5)$ in the standard (x,y) coordinate plane?

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

12. In Cherokee County, the fine for speeding is \$17 for each mile per hour the driver is traveling over the posted speed limit. In Cherokee County, Kirk was fined \$221 for speeding on a road with a posted speed limit of 30 mph. Kirk was fined for traveling at what speed, in miles per hour?

- F. 13
- G. 17
- H. 43
- J. 47
- K. 60

13. What is the sum of the solutions of the 2 equations below?

$$\begin{aligned} 8x &= 12 \\ 2y + 10 &= 22 \end{aligned}$$

- A. $2\frac{2}{5}$
- B. $7\frac{1}{2}$
- C. 9
- D. 10
- E. $17\frac{1}{2}$

14. The average of 5 distinct scores has the same value as the median of the 5 scores. The sum of the 5 scores is 420. What is the sum of the 4 scores that are NOT the median?

- F. 315
- G. 320
- H. 336
- J. 350
- K. 360

15. What is the value of the expression below?

$$| |-8 + 4| - |3 - 9| |$$

- A. -18
- B. -2
- C. 0
- D. 2
- E. 18

16. Which of the following expressions is equivalent to $x^{\frac{2}{3}}$?

F. $\frac{x^2}{3}$

G. $\frac{x(2)}{3}$

H. $\sqrt{x^3}$

J. $\sqrt[3]{x}$

K. $\sqrt[3]{x^2}$

17. In the standard (x,y) coordinate plane, what is the slope of the line given by the equation $4x = 7y + 5$?

A. $-\frac{4}{7}$

B. $\frac{4}{7}$

C. $\frac{7}{4}$

D. 4

E. 7

18. For which of the following conditions will the sum of integers m and n *always* be an odd integer?

F. m is an odd integer.

G. n is an odd integer.

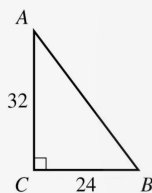
H. m and n are both odd integers.

J. m and n are both even integers.

K. m is an odd integer and n is an even integer.

19. The lengths of the 2 legs of right triangle $\triangle ABC$ shown below are given in inches. The midpoint of \overline{AB} is how many inches from A ?

- A. 16
- B. 20
- C. 21
- D. 28
- E. 40



20. In $\triangle DEF$, the length of \overline{DE} is $\sqrt{30}$ inches, and the length of \overline{EF} is 3 inches. If it can be determined, what is the length, in inches, of \overline{DF} ?

F. 3

G. $\sqrt{30}$

H. $\sqrt{33}$

J. $\sqrt{39}$

K. Cannot be determined from the given information