

13.) $(-2)^3 + (-3)^2 =$

- a) - 17 d) 1
b) - 1 e) 17
c) 0

14.) Which of the following equations has a graph that is a straight line?

- a) $y = x^2 + 1$
b) $2x + 3xy = 5$
c) $x^2 - y^2 = 3$
d) $x - y = 2x$
e) None of these

15.) A line not parallel to $y - 3 = ax$ is

- a) $x - 3 = \frac{y}{a}$ d) $2ax = 2y + 5$
b) $x = \frac{y}{a} - \frac{3}{a}$ e) $ax - y = 5a$
c) $x = ay - 3$

16.) If $(ax + 3y)^2 = a^2x^2 - 6xy + 9y^2$,

then $a =$

- a) 2 d) - 1
b) - 2 e) - 6
c) 1

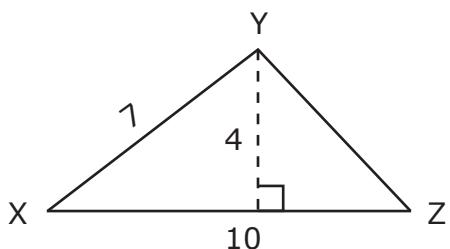
17.) If $d = \frac{F+2}{p}$, then $p =$

- a) $d(F+2)$ d) $\frac{F+2}{d}$
b) $dF - 2$ e) $\frac{d-2}{F}$
c) $\frac{d}{F+2}$

18.) Solve for x : $x + 3(x - 5) = x - 2(x + 5)$

- a) $x = -1$ d) $x = 3$
b) $x = 1$ e) $x = 5$
c) $x = 2$

19.) The area of triangle XYZ is



- a) 20 d) 35
b) 22 e) 40
c) 28

20.) $\frac{x}{3} + \frac{x}{2} - \frac{x}{5} =$

- a) $\frac{x}{30}$ d) 0
b) $\frac{x}{5}$ e) $\frac{19x}{30}$
c) $\frac{x+5}{5}$

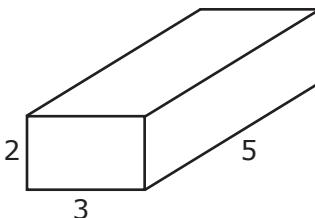
21.) Express 0.000719 in scientific notation.

- a) 7.19×10^3
b) 7.19×10^{-3}
c) 0.719×10^{-4}
d) 7.19×10^{-4}
e) 7.19×10^4

22.) If $\frac{5}{x+1} = \frac{x+1}{x^2-1}$, then $x =$

- a) $\frac{1}{2}$ d) $\frac{3}{2}$
b) $\frac{1}{4}$ e) $\frac{\sqrt{2}}{2}, -\frac{\sqrt{2}}{2}$
c) $\sqrt{\frac{3}{2}}, -\sqrt{\frac{3}{2}}$

23.) What is the volume of this rectangular box?



- a) 24 d) 62
b) 30 e) None of these
c) 60

24.) The remainder when $x^3 - 4x^2 + x + 9$ is divided by $x - 2$ is

- a) -1 d) -17
b) 3 e) 19
c) 15