CP Algebra 2 Summer Packet

Solve each equation.

1) $-15 = \frac{n}{10}$

2) $x + 4 = 18$

3) $\frac{9}{2} = n - 5$

4) $\frac{1}{2}x = \frac{11}{12}$

5) $n - 5 + 2 = 5$

6) $-8 - 2a - 6a = 24$

7) $7x - 6x = 5$

8) $-\frac{1}{2}a + a = 4$

9) $\frac{18}{5} = \frac{11}{5}b + \frac{1}{5}b$

10) $\frac{4}{7}n - 3n = \frac{51}{14}$

Solve each equation for the indicated variable.

11) $ac = d + r$, for a

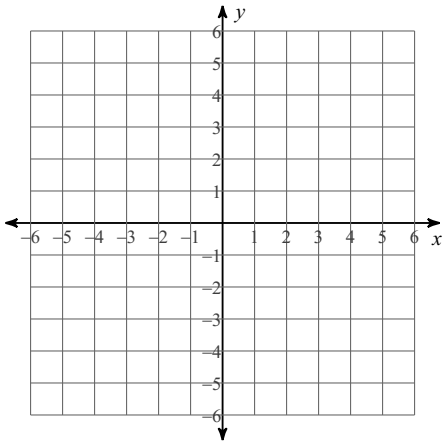
12) $a + c = r - d$, for a

13) $ma = n - p$, for a

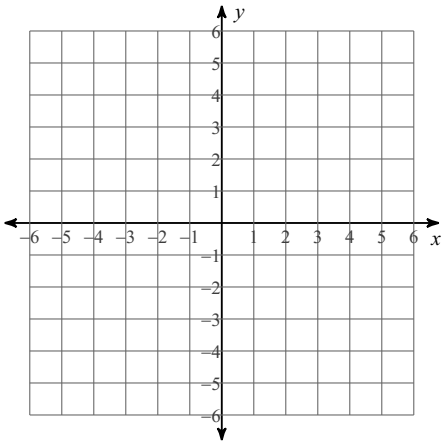
14) $xk = wv$, for x

Sketch the graph of each line.

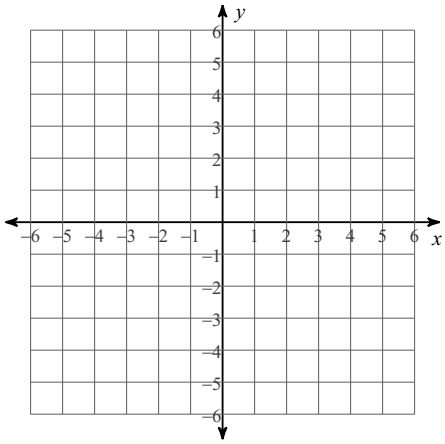
15) $y = -4x - 4$



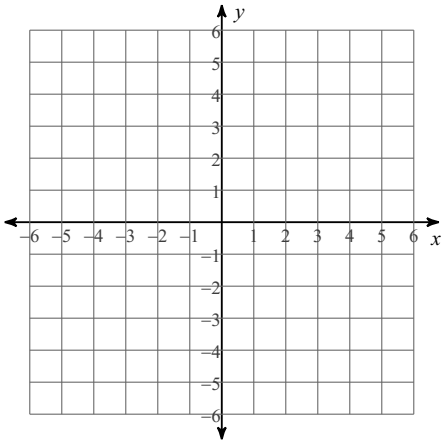
16) $y = 3x - 5$



17) $x - y = 3$

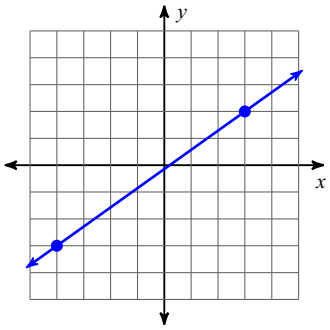


18) $x + 2y = 6$

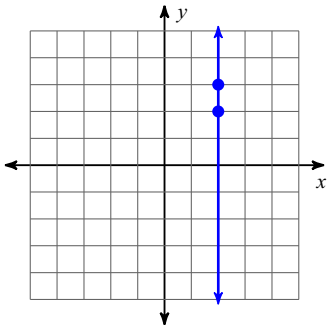


Find the slope of each line.

19)



20)



Find the slope of the line through each pair of points.

21) $(10, 7), (-8, 10)$

22) $(-12, 0), (-11, 0)$

Find the slope of each line.

23) $y = -\frac{1}{2}x + 2$

24) $y = -2x + 2$

Find each product.

25) $6(8n - 6)$

26) $5n(4n - 7)$

27) $(5v - 6)(6v - 7)$

28) $(3x - 5)(4x + 8)$

Simplify each expression.

29) $(2r^3 + 7r^2 + 2r) - (8r^4 + 5r^2 - 6r^3)$

30) $(6k^3 + 6k - 7k^2) + (k^3 + k + 2k^2)$