

**Summer Assignment****Solve each equation.**

1)  $-6(1 - 7n) = -174$

2)  $8(7x - 5) = 184$

3)  $-3v + 6(1 - 10v) = 6(-8 - 11v)$

4)  $-12k + 2(k - 6) = -11 - 9(1 + k)$

**Evaluate each expression.**

5)  $\left(-1\frac{1}{2}\right) + 1\frac{5}{6}$

6)  $2\frac{1}{4} - \left(-2\frac{3}{4}\right)$

7)  $\left(-2\frac{4}{7}\right) - \left(-3\frac{1}{5}\right)$

8)  $\left(-\frac{7}{8}\right) + 3\frac{1}{2}$

$$9) 1\frac{4}{7} + \left(-3\frac{1}{3}\right)$$

$$10) \left(-\frac{13}{8}\right) + \frac{2}{3}$$

$$11) \frac{1}{4} \cdot -\frac{3}{4}$$

$$12) 2\frac{2}{7} \cdot -3$$

$$13) -\frac{10}{7} \cdot -\frac{3}{2}$$

$$14) -\frac{7}{6} \cdot -\frac{1}{3}$$

$$15) -3 \cdot \frac{23}{13}$$

$$16) -2\frac{14}{15} \cdot \frac{5}{8}$$

$$17) -1\frac{1}{9} \div \frac{5}{7}$$

$$18) -3 \div 4\frac{1}{5}$$

$$19) \frac{2}{5} \div \frac{2}{7}$$

$$20) \frac{4\frac{1}{6}}{-3\frac{1}{2}}$$

$$21) \frac{10\frac{3}{8}}{-\frac{9}{7}}$$

$$22) \frac{5}{1\frac{1}{6}}$$

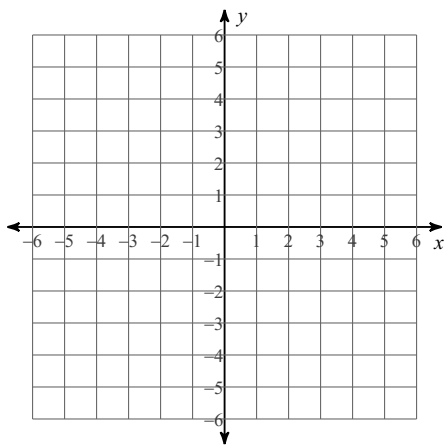
$$23) \frac{-1}{10} \div \frac{9}{8}$$

$$24) \frac{-3}{2} \div -1$$

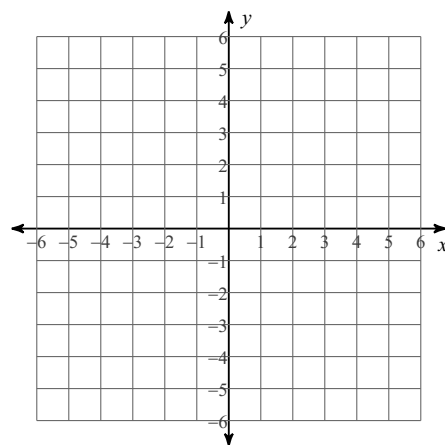
$$25) \frac{8}{7} \div -7$$

**Sketch the graph of each line.**

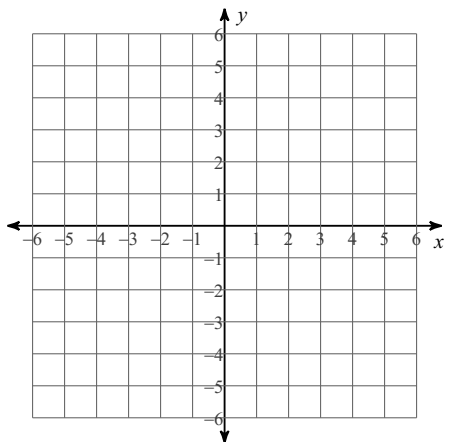
$$26) y = 0$$



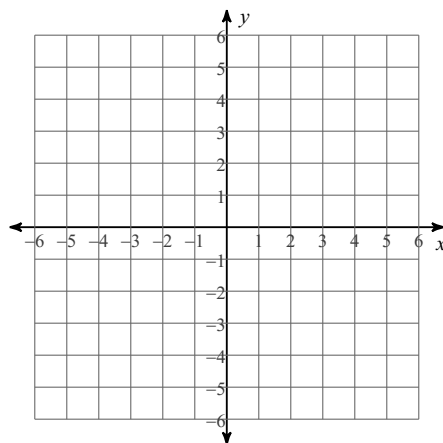
$$27) y = \frac{7}{5}x - 3$$



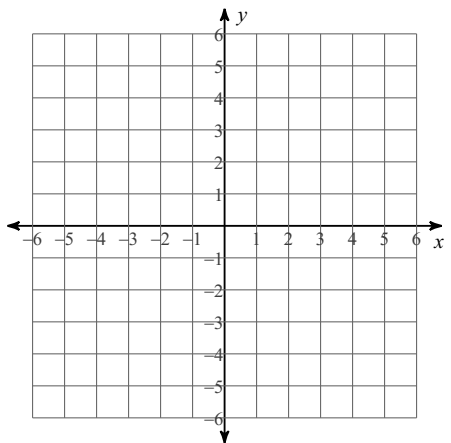
$$28) y = -\frac{3}{4}x + 3$$



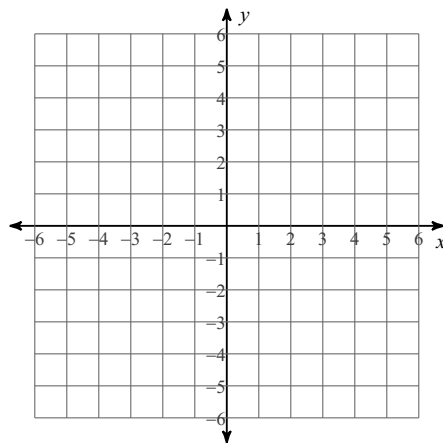
$$29) y = -4x - 3$$



$$30) y = -1$$



$$31) 5x - 2y = -6$$



**Solve each equation.**

32)  $5 + \frac{a}{8} = 6$

33)  $\frac{x}{2} - 8 = -2$

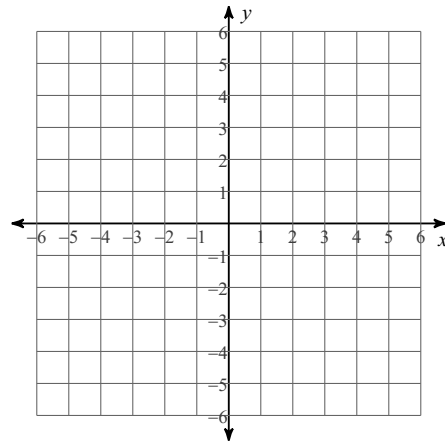
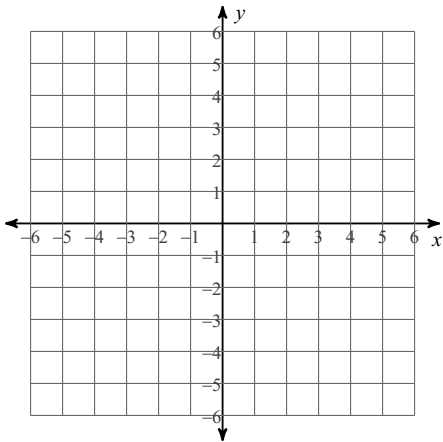
34)  $-6 + 4v = -90$

35)  $-7 + 17x = -466$

**Sketch the graph of each linear inequality.**

36)  $y \geq \frac{10}{3}x + 5$

37)  $y > -\frac{6}{5}x - 4$



**Simplify each expression.**

38)  $(2n^4 - 5n^3) - (3n^3 + 1)$

39)  $(4r^3 + 2r^2) - (3r^3 - 4r^2)$

40)  $(5 + 13x^3 + 9x^5) - (-7x^5 - 6x^4 + 14)$

41)  $(7 + 7m^3 + 6m^2) - (-10m^2 + 9 + 14m^3)$

**Find each product.**

42)  $5(4k - 4)$

43)  $8m(7m - 4)$

44)  $-3(-7m^2 + 2m + 1)$

45)  $3(-6v^2 + 8v + 1)$

$$46) (-2a - 6)(-3a - 2)$$

$$47) (3v + 4)(-8v - 8)$$

**Solve each proportion.**

$$48) \frac{p}{10} = \frac{5}{7}$$

$$49) \frac{9}{5} = \frac{n}{3}$$

$$50) \frac{n}{8} = \frac{3}{10}$$

$$51) \frac{11}{5} = \frac{n}{8}$$

$$52) \frac{5}{n} = -\frac{12}{6}$$

$$53) \frac{n}{3} = \frac{9}{8}$$