

1. $P = 2(L + w)$, $L = 8$, $w = 2$

2. $(x-1)(x-2)$, $x = 1$

3. $A = \pi r^2$, $\pi = 3.14$, $r = 10$

4. $C = \frac{5}{9}(F - 32)$, $F = 50$

5. $y = 2x^2 - 4x - 10$, $x = -3$

6. 8^{-2} evaluate

7. $y = \frac{3}{2}x + 4$, $x = -\frac{2}{3}$, find y

8. $y = 41.95x + 0.10m$, $x = 10$, $m = 900$

9. $k = c + 499$, $k = 10$, find c

10. $c = p + (0.65p)$, $p = 50$

11. $PE = 10000(1.10)^t$, $t = 2$

12. $f(x) = 1000x - 200x^2$, $x = 2$

13. $y = \sqrt{x+1} + 50$, $x = 0$

14. $x = \frac{1}{8}$, $y = -x$, find $x - y$

15. 48, 46, 52, 54 find average

16. $P(t) = 50t + 400$, $t = 10$

17. $f(x) = 2000x + 4000$, $x = 10$

18. $f(x) = \frac{x+14}{x-4}$, $f(2)$

19. $x - 20 = 9x - 20$

20. $x - 20 = 3x + 20$

21. $7x - 4 = 12 + 4x$

22. $\frac{x}{8} = \frac{x+1}{9}$

23. $5x = 18 + 2x$

24. $3 = \frac{12-x}{x}$

25. $4 - x = 8(x - 4)$

26. $6(x - 2) - 20 = 2x$

27. $1 + \frac{6}{x} = -17$

28. $3x + 7y = 149$, $x = 3$, find y

29. $\frac{2}{3x} + \frac{1}{x} = 5$

30. $4x - 1 = x$, find $24x$

31. $2x + 1 = 6$, find $x - 1$

32. $m(x) = x + 4$, $m(-8)$

33. $m(x) = \frac{x}{x^2 - 4}$, $m(-2)$

34. $(7x - y)(7x + y)$

35. $(7x - y)^2$

36. $(1 - ax)(3x + 1)$

37. $a^2 + 16b^2 = (a + 4b)(a + 4b)$ $N =$

38. $(5xy^3)^3$

39. $\frac{-10x^3y^{10}}{4xy^{14}}$

40. $V = \pi r^2 h$, $r = 2a$, $h = 3a + 5$

41. $\frac{8xy + y}{y}$

42. $\left(\frac{2x}{3y}\right)\left(\frac{27y}{8x^3}\right)$

43. $\left(\frac{7x}{y}\right)^2$

44. $x^2 - 6x = 16$

45. $x^2 - 12 = x$

46. $6x^3 + 18x^2 + 12x = 0$

47. $\sqrt{x+1} = 4$

48. $\sqrt{x+1} = 4$

TS/59

~~51818~~
Alyson

56. graph $y = -2x - 6$

57. $T = .90T$

58. $x - .95x = 1000$

59. graph $y = (x - 1)^2 - 9$

49. $(x + 1)^2 = 4$

50. $\frac{25x^2}{16} - \frac{9y^2}{49}$ factor

51. $8x^3(xy^2 + y^2)$

52. $7x^2 - 14 = m$, $x^2 - 2 =$

53.  $2x$ if area = 400 find x

54. $x + y = 7$

$3x + 4y = 23$

55. $2x - 8 < 4x$

① $P = 2(L + W)$, $L = 8$, $W = 2$

$$P = 2(8 + 2)$$

$$P = 2(10)$$

$$P = 20$$

①

② $(X - 1)(X - 2)$, $X = 1$

$$(1 - 1)(1 - 2) =$$

$$(0)(-1) =$$

$$0 =$$

③ $A = \pi r^2$, $\pi = 3.14$, $r = 10$

$$A = 3.14(10)^2$$

$$A = 3.14(10)(10)$$

$$A = 3.14(100)$$

$$A = 314.00$$

$$\begin{array}{r} 3.14 \\ \times 100 \\ \hline 000 \\ 314 \\ \hline 314.00 \end{array}$$

④ $C = \frac{5}{9}(F - 32)$, $F = 50$, find C

$$C = \frac{5}{9}(50 - 32)$$

$$\begin{array}{r} 50 \\ -32 \\ \hline 18 \end{array}$$

$$C = \frac{5}{9}(18)$$

$$C = \frac{5}{9}(\cancel{18})$$

$$C = \frac{5}{1}(\frac{2}{1})$$

$$C = \frac{10}{1}$$

$$C = 10 \quad \checkmark$$

⑤ $y = 2x^2 - 4x - 10$, $x = -3$

$$y = 2(-3)^2 - 4(-3) - 10$$

$$y = 2(-3)(-3) - 4(-3) - 10$$

$$y = 2(9) - 4(-3) - 10$$

$$y = 18 + 12 - 10$$

$$y = 30 - 10$$

$$y = 20 \quad \checkmark$$

6 8^{-2} evaluate

$\frac{1}{8^2} =$ rewrite with positive exponent (power) 3.

$\frac{1}{8 \cdot 8} =$

$\frac{1}{64} =$ ✓

7 $y = \frac{3}{2}x + 4$, $x = -\frac{2}{3}$, find y

$y = \frac{3}{2}\left(-\frac{2}{3}\right) + 4$

$y = -\frac{6}{6} + 4$

$y = -1 + 4$

$y = 3$ ✓

⑧ $y = 41.95x + 0.10m$, $x=10$, $m=900$

$$y = 41.95(10) + 0.10(900)$$

$$y = 419.50 + 90.00$$

$$y = 509.50 \quad \checkmark$$

41.95
 $\times 10$

 0000
 4195

 419.50

900
 $\times 10$

 0000
 900

 90.00
 419.50
 $+$ 90.00

 509.50

⑨ $K = C + 499$, $K=10$, find C

$$10 = C + 499 \quad \text{subst}$$

$$10 - 499 = C + 499 - 499$$

$$-489 = C \quad \checkmark$$

10. $C = P + (0.65P)$, $P = 50$, find C .

$$C = 50 + (0.65(50))$$

$$C = 50 + 32.50$$

$$C = 82.50$$

$$\begin{array}{r} 0.65 \\ \times 50 \\ \hline 000 \\ 325 \\ \hline 32.50 \end{array}$$

$$\begin{array}{r} 50.00 \\ + 32.50 \\ \hline 82.50 \end{array}$$

11. $P(t) = 10000(1.10)^t$, $t = 2$

$$P(2) = 10000(1.10)^2$$

$$P(2) = 10000(1.10)(1.10)$$

$$P(2) = 10000(1.21)$$

$$P(2) = 12,100.00$$

$$\begin{array}{r} 1.10 \\ \times 1.10 \\ \hline 000 \\ 110 \\ 110 \\ \hline 1.2100 \end{array}$$

$$\begin{array}{r} 1.21 \\ \times 10000 \\ \hline 12,100.00 \end{array}$$

(12) $f(x) = 1000x - 200x^2$, $x=2$

(6)

$$f(2) = 1000(2) - 200(2)^2$$

$$f(2) = 1000(2) - 200(2)(2)$$

$$f(2) = 1000(2) - 200(4)$$

$$f(2) = 2000 - 800$$

$$\begin{array}{r} 2000 \\ - 800 \\ \hline 1200 \end{array}$$

$f(2) = 1,200$ ✓

(13) $y = \sqrt{x+1} + 50$, $x=0$

$$y = \sqrt{0+1} + 50$$

$$y = \sqrt{1} + 50$$

$$y = 1 + 50$$

$y = 51$ ✓

14. $x = \frac{1}{8}$, $y = -x$ find $x - y$

7.

$$x - y =$$

$$x - (-x) = \text{subst}$$

$$x + x =$$

$$1x + 1x =$$

$$2x =$$

$$2\left(\frac{1}{8}\right) = \text{subst}$$

$$\frac{2}{1}\left(\frac{1}{8}\right) =$$

$$\frac{2}{8} =$$

$$\frac{2(1)}{2(4)}$$

$$\frac{1}{4} =$$

15. 48, 46, 52, 54 find average

average = 50

$$\begin{array}{r} 50 \\ 4 \overline{) 200} \\ \underline{-(20)} \\ 0 \\ \underline{-(0)} \\ 0 \end{array}$$

$$\begin{array}{r} 2 \\ 48 \\ 46 \\ 52 \\ + 54 \\ \hline 200 \end{array}$$

①⑥ $P(t) = 50t + 400$, $t = 10$

$$P(10) = 50(10) + 400$$

$$P(10) = 500 + 400$$

$$P(10) = 900$$

⑧

①⑦ $f(x) = 2000x + 4000$, $x = 10$

$$f(10) = 2000(10) + 4000$$

$$f(10) = 20,000 + 4,000$$

$$f(10) = 24,000$$

$$(18) f(x) = \frac{x+14}{x-4}, \quad f(2)$$

$$f(2) = \frac{2+14}{2-4}$$

$$f(2) = \frac{16}{-2}$$

$$f(2) = -8$$

(9)

$$(19) x - 20 = 9x - 20$$

$$x - 20 + 20 = 9x - 20 + 20$$

$$x = 9x$$

$$x - 9x = 9x - 9x$$

$$1x - 9x = 0$$

$$-8x = 0$$

$$\frac{-8x}{-8} = \frac{0}{-8}$$

$$x = 0$$

20) $x - 20 = 3x + 20$

$$x - \cancel{20} + \cancel{20} = 3x + 20 + 20$$

$$x = 3x + 40$$

$$x - 3x = 3x + 40 - 3x$$

$$1x - 3x = 40 \quad \text{rewrite}$$

$$-2x = 40$$

$$\frac{-2x}{-2} = \frac{40}{-2}$$

$$x = -20 \quad \checkmark$$

21)

$$7x - 4 = 12 + 4x$$

$$7x - \cancel{4} + \cancel{4} = 12 + 4x + 4$$

$$7x = 4x + 16$$

$$7x - 4x = 4x + 16 - 4x$$

$$3x = 16$$

$$\frac{3x}{3} = \frac{16}{3}$$

$$x = \frac{16}{3} \quad \checkmark$$

22) $\frac{x}{8} = \frac{x+1}{9}$

$9(x) = 8(x+1)$ cross mult

$9x = 8x + 8$

$9x - 8x = 8x + 8 - 8x$

$1x = 8$

$x = 8$ ✓

23) $5x = 18 + 2x$

$5x - 2x = 18 + 2x - 2x$

$3x = 18$

$\frac{3x}{3} = \frac{18}{3}$

$x = 6$ ✓

$$\textcircled{24} \quad 3 = \frac{12-x}{x}$$

$$\frac{3}{1} = \frac{12-x}{x}$$

$\textcircled{12}$

$$3(x) = 1(12-x) \quad \text{cross mult}$$

$$3x = 12 - 1x$$

$$3x + 1x = 12 - \cancel{1x} + \cancel{1x}$$

$$4x = 12$$

$$\frac{4x}{4} = \frac{12}{4}$$

$$x = 3$$

✓

$$\textcircled{25} \quad 4 - x = 8(x - 4)$$

$$4 - x = 8x - 32$$

$$\cancel{4} - x - \cancel{4} = 8x - 32 - 4$$

$$-x = 8x - 36$$

$$-x - 8x = 8x - 36 - 8x$$

$$-1x - 8x = -36$$

$$-9x = -36$$

$$\frac{-9x}{-9} = \frac{-36}{-9}$$

$$x = 4$$

✓

26

$$6(x-2) - 20 = 2x$$

$$6x - 12 - 20 = 2x$$

$$6x - 32 = 2x$$

$$6x - 32 + 32 = 2x + 32$$

$$6x = 2x + 32$$

$$6x - 2x = 2x + 32 - 2x$$

$$4x = 32$$

$$\frac{4x}{4} = \frac{32}{4}$$

$$x = 8$$

13

27

$$1 + \frac{6}{x} = -17$$

$$1 + \frac{6}{x} - 1 = -17 - 1$$

$$\frac{6}{x} = -18$$

$$\frac{6}{x} = \frac{-18}{1}$$

$$1(6) = -18(x) \quad \text{Cross mult}$$

$$6 = -18x$$

$$\frac{6}{-18} = \frac{-18x}{-18}$$

$$-\frac{6}{18} = x$$

$$\frac{6(-1)}{6(3)} = x$$

$$-\frac{1}{3} = x$$

28. $3x + 7y = 149$, $x = 3$, find y

$3(3) + 7y = 149$ Subst

$9 + 7y = 149$

$9 + 7y - 9 = 149 - 9$

$7y = 140$

$\frac{7y}{7} = \frac{140}{7}$

$y = 20$

$$\begin{array}{r} 20 \\ 7 \overline{) 140} \\ \underline{-(14)} \\ 0 \\ \underline{-(0)} \\ 0 \end{array}$$

29. $\frac{2}{3x} + \frac{1}{x} = 5$

$\frac{2}{3x} + \frac{1}{x} = \frac{5}{1}$

$\frac{2}{3x}(3x) + \frac{1}{x}(3x) = \frac{5}{1}(3x)$ Mult by LCD

$2(1) + 1(3) = 5(3x)$

$2 + 3 = 15x$

$5 = 15x$

$\frac{5}{15} = \frac{15x}{15}$

$\frac{5}{15} = x$

$\frac{5(1)}{5(3)} = x$

$\frac{1}{3} = x$

30.

$$4x - 1 = x \quad \text{Find } 24x$$

$$4x - x + 1 = x + 1$$

$$4x = x + 1$$

$$4x = 1x + 1$$

$$4x - 1x = 1x + 1 - 1x$$

$$3x = 1$$

$$\frac{3x}{3} = \frac{1}{3}$$

$$x = \frac{1}{3}$$

$$\text{Find } 24x =$$

$$24\left(\frac{1}{3}\right) = \text{subst}$$

$$\frac{24}{1}\left(\frac{1}{3}\right) =$$

$$\frac{24}{3} =$$

$$8 =$$

15.

31. $2x+1=6$, find ~~$x-1$~~

$$2x+1=6-1$$

$$2x=5$$

$$\frac{2x}{2} = \frac{5}{2}$$

$$x = \frac{5}{2} \quad \checkmark$$

find $x-1=$

$$\frac{5}{2} - 1 = \text{subst}$$

$$\frac{5}{2} - \frac{2}{2} = \text{rewrite}$$

$$\frac{5-2}{2} =$$

$$\frac{3}{2} = \quad \checkmark \quad \text{answer}$$

32. $m(x) = x + 4$ Find $m(-8)$

$$m(-8) = (-8) + 4$$

$$m(-8) = -8 + 4$$

$$m(-8) = -4$$

17

33. $m(x) = \frac{x}{x^2 - 4}$, Find $m(-2)$

$$m(-2) = \frac{(-2)}{(-2)^2 - 4}$$

$$m(-2) = \frac{-2}{(-2)(-2) - 4}$$

$$m(-2) = \frac{-2}{4 - 4}$$

$$m(-2) = \frac{-2}{0}$$

= undefined

division by zero

34. $(7x-y)(7x+y) =$

$$49x^2 + \cancel{7xy} - \cancel{7xy} - y^2 =$$

$$49x^2 - y^2 = \quad \checkmark$$

18

35. $(7x-y)^2 =$

$$(7x-y)(7x-y) =$$

$$49x^2 - 7xy - 7xy + y^2 =$$

$$49x^2 - 14xy + y^2 = \quad \checkmark$$

36. $(1-ax)(3x+1) =$

19

$$3x + 1 - 3ax^2 - 1ax =$$

$$3x + 1 - 3ax^2 - ax =$$

37. $a^2 + N + 7b^2 = (a+b)(a+7b)$ $N =$

$$= a^2 + 7ab + ab + 7b^2$$

$$= a^2 + 7a\bar{b} + 1a\bar{b} + 7b^2$$

$$= a^2 + 8ab + 7b^2$$

$$N = 8ab$$

38

$$(5x^1y^3)^3 =$$

$$(5^1x^1y^3)^3 =$$

$$5^{1(3)} x^{1(3)} y^{3(3)}$$

= Mult powers

$$5^3 x^3 y^9 =$$

$$5 \cdot 5 \cdot 5 x^3 y^9 =$$

$$125 x^3 y^9 =$$

39

$$\frac{-10x^3y^{10}}{4xy^{14}} =$$

$$\frac{2(-5)x^3y^{10}}{2(2)x^1y^{14}} =$$

$$\frac{\cancel{2}(-5)x^{3-1}}{\cancel{2}(2)y^{14-10}} =$$

$$\frac{-5x^2}{2y^4} =$$

20

40. $V = \pi r^2 h$, $r = 2a$, $h = 3a + 5$

$$V = \pi (2a)^2 (3a + 5)$$

$$V = \pi (2a)(2a)(3a + 5)$$

$$V = \pi (4a^2)(3a + 5)$$

$$V = \pi (12a^3 + 20a^2)$$

$$V = 12\pi a^3 + 20\pi a^2$$

21

41. $\frac{8xy + y}{y} =$

$$\frac{8xy}{y} + \frac{y}{y} =$$

$$8x + 1 =$$

42 $\left(\frac{2x}{3y}\right)\left(\frac{27y}{8x^3}\right) =$

$$\frac{2x}{3y} \cdot \frac{3 \cdot 3 \cdot 3 \cdot y}{2 \cdot 2 \cdot 2 \cdot x \cdot x \cdot x} =$$

$$\frac{\cancel{2x}}{\cancel{3y}} \cdot \frac{\cancel{3} \cdot \cancel{3} \cdot \cancel{3} \cdot \cancel{y}}{\cancel{2} \cdot \cancel{2} \cdot \cancel{2} \cdot \cancel{x} \cdot x \cdot x} =$$

$$\frac{3 \cdot 3}{2 \cdot 2 \cdot x \cdot x} =$$

$$\frac{9}{4x^2} =$$

Primes 2, 3, 5, 7, ...

$$\begin{array}{r} 3 \overline{)27} \\ 3 \overline{)9} \\ 3 \overline{)3} \\ 1 \end{array}$$

24

$$\begin{array}{r} 2 \overline{)8} \\ 2 \overline{)4} \\ 2 \overline{)2} \\ 1 \end{array}$$

$$27 = 3 \cdot 3 \cdot 3$$

$$8 = 2 \cdot 2 \cdot 2$$

43 $\left(\frac{7x}{y}\right)^2 =$

$$\left(\frac{7x}{y} \cdot \frac{7x}{y}\right) =$$

$$\frac{49x^2}{y^2} =$$

44

$$x^2 - 6x = 16$$

$$x^2 - 6x - 16 = 16 - 16$$

$$x^2 - 6x - 16 = 0$$

$$(x + 2)(x - 8) = 0$$

$$\text{So } x + 2 = 0 \text{ OR } x - 8 = 0$$

$$x + 2 - 2 = 0 - 2 \text{ OR } x - 8 + 8 = 0 + 8$$

$$x = -2 \text{ OR } x = 8$$

Use Quadratic Formula

$$1x^2 - 6x - 16 = 0$$

$$a = 1, b = -6, c = -16$$

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

$$x = \frac{-(-6) \pm \sqrt{(-6)^2 - 4(1)(-16)}}{2(1)}$$

$$x = \frac{6 \pm \sqrt{36 + 64}}{2}$$

$$x = \frac{6 \pm \sqrt{100}}{2}$$

$$x = \frac{6 \pm 10}{2}$$

$$x = 3 \pm 5$$

Possibly
16.1
2.8
4.4

23

$$x = 3 - 5 \text{ OR } x = 3 + 5$$

$$x = -2 \text{ OR } x = 8$$

45. $x^2 - 12 = x$

$$x^2 - 12 - x = x - x$$

$$x^2 - 12 - x = 0$$

$$x^2 - x - 12 = 0$$

$$(x + 3)(x - 4) = 0$$

Let $x + 3 = 0$ OR $x - 4 = 0$

$$x + 3 - 3 = 0 - 3 \quad \text{OR} \quad x - 4 + 4 = 0 + 4$$

$x = -3$ OR $x = 4$

Use Quadratic formula

$$1x^2 - 1x - 12 = 0$$

$$a = 1, \quad b = -1, \quad c = -12$$

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

$$x = \frac{-(-1) \pm \sqrt{(-1)^2 - 4(1)(-12)}}{2(1)}$$

$$x = \frac{1 \pm \sqrt{1 + 48}}{2}$$

$$x = \frac{1 \pm \sqrt{49}}{2}$$

$$x = \frac{1 \pm 7}{2}$$

Possible

12.1

6.2

3.4

24

$$x = \frac{1-7}{2} \quad \text{OR} \quad x = \frac{1+7}{2}$$

$$x = \frac{-6}{2} \quad \text{OR} \quad x = \frac{8}{2}$$

$x = -3$

OR $x = 4$

46 $6x^3 + 18x^2 + 12x = 0$

$$6x(x^2 + 3x + 2) = 0$$

$$6x(x+1)(x+2) = 0$$

WA $6x = 0$ OR $x+1 = 0$ OR $x+2 = 0$

$$\frac{6x}{6} = \frac{0}{6} \quad \text{OR} \quad x + \cancel{x} = 0 - 1 \quad \text{OR} \quad x + \cancel{x} = 0 - 2$$

$x = 0$ OR $x = -1$ OR $x = -2$

47 $\sqrt{x+1} = 4$

$$(\sqrt{x+1})^2 = (4)^2$$

$$x+1 = 16$$

$$x + \cancel{x} = 16 - 1$$

$x = 15$

P. 551b/b

2.1

25.

48.

$$\sqrt{x} + 1 = 4$$

$$\sqrt{x} + \cancel{1} = 4 - 1$$

$$\sqrt{x} = 3$$

$$(\sqrt{x})^2 = (3)^2$$

$$x = 9$$

26

49.

$$(x+1)^2 = 4$$

$$\sqrt{(x+1)^2} = \pm\sqrt{4}$$

$$x+1 = \pm 2$$

$$x+1 = -2$$

OR

$$x+1 = 2$$

$$x+1\cancel{+1} = -2-1$$

OR

$$x+1\cancel{+1} = 2-1$$

$$x = -3$$

OR

$$x = 1$$

50. $\frac{25x^2}{16} - \frac{9y^2}{49} =$ factor

$\left(\frac{5x}{4}\right)^2 - \left(\frac{3y}{7}\right)^2 =$ rewrite

Formula
 $a^2 - b^2 = (a+b)(a-b)$

$\left(\frac{5x}{4} + \frac{3y}{7}\right)\left(\frac{5x}{4} - \frac{3y}{7}\right) =$

27

51. $8x^3(xy^2 + y^2) =$

$8x^3(1x^1y^2 + 1y^2) =$

$8x^{3+1}y^2 + 8x^3y^2 =$

$8x^4y^2 + 8x^3y^2 =$

52

$$7x^2 - 14 = m$$

find

$$x^2 - 2 =$$

$$\frac{7x^2}{7} - \frac{14}{7} = \frac{m}{7}$$

divide

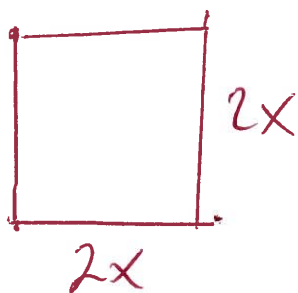
$$x^2 - 2 = \frac{m}{7}$$

$$x^2 - 2 = \frac{m}{7}$$

25

53

square



If area = 400 then find x.

$$L = 2x$$
$$W = 2x$$

$$A = L \cdot W$$

$$A = (2x)(2x) = 400$$

$$(2x)(2x) = 400$$

$$4x^2 = 400$$

$$\frac{4x^2}{4} = \frac{400}{4}$$

$$x^2 = 100$$

$$\sqrt{x^2} = \sqrt{100}$$

$$x = 10$$

54

$$x + y = 7$$

$$3x + 4y = 23$$

$$(x + y = 7) \quad (-4) \text{ Mult}$$

$$(3x + 4y = 23) \quad (1)$$

$$-4x - 4y = -28$$

$$3x + 4y = 23$$

$$-1x + 0 = -5$$

$$-1x = -5$$

$$\frac{-1x}{-1} = \frac{-5}{-1}$$

$$x = 5$$

$$x + y = 7$$

$$(5) + y = 7 \quad \text{Subst}$$

$$5 + y = 7$$

$$y + 5 = 7 - 5$$

$$y = 2$$

$$(x, y) = (5, 2)$$

✓
answer

29

53.

$$2x - 8 < 4x$$

$$2x - \cancel{8} + \cancel{8} < 4x + 8$$

$$2x < 4x + 8$$

$$2x - 4x < \cancel{4x} + 8 - \cancel{4x}$$

$$-2x < 8$$

$$\frac{-2x}{-2} > \frac{8}{-2}$$

Divide by a negative
and turn alligator
around

$$x > -4$$



$$(-4, \infty)$$

56 graph

$$y = -2x - 6$$

$$y = -2(0) - 6$$

$$y = 0 - 6$$

$$y = -6$$

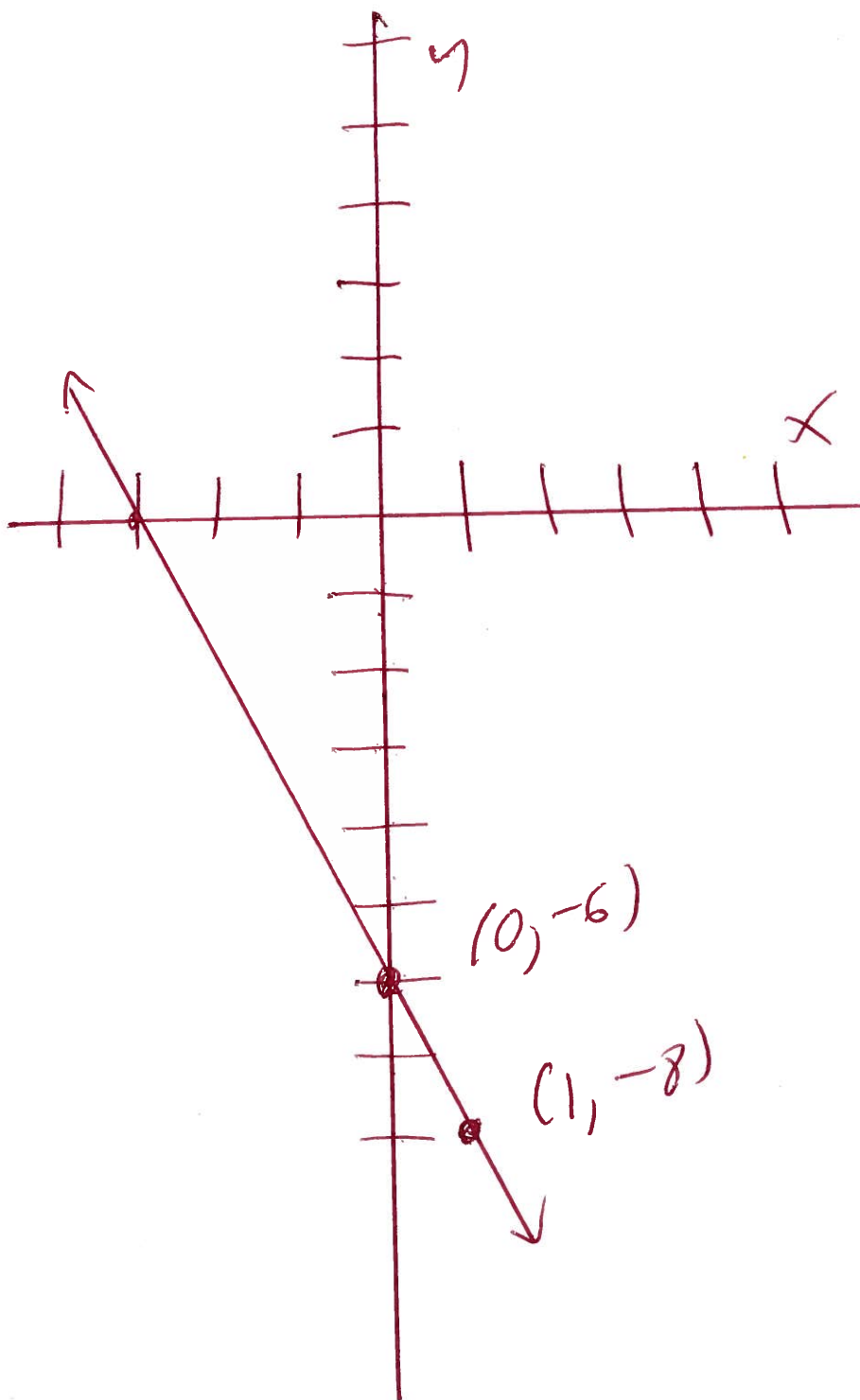
x	y
0	-6
1	-8

31

$$y = -2(1) - 6$$

$$y = -2 - 6$$

$$y = -8$$



57

$$T - .90T =$$

$$1.00T - .90T = \text{rewrite}$$

$$.10T =$$

✓

32

58

$$X - .95X = 1000$$

$$1.00X - .95X = 1000 \text{ rewrite}$$

$$.05X = 1000$$

$$\frac{.05X}{.05} = \frac{1000}{.05}$$

$$\begin{array}{r} 20,000 \\ .05 \overline{) 1000.00} \\ \underline{-(10)} \\ 0000 \\ \underline{-(0000)} \\ 0 \end{array}$$

$$X = 20,000$$

✓

59 graph

$$y = (x-1)^2 - 9$$

$$y = (0-1)^2 - 9$$

$$y = (-1)^2 - 9$$

$$y = (-1)(-1) - 9$$

$$y = 1 - 9$$

$$y = -8$$

$$y = (1-1)^2 - 9$$

$$y = (0)^2 - 9$$

$$y = (0)(0) - 9$$

$$y = 0 - 9$$

$$y = -9$$

$$y = (2-1)^2 - 9$$

$$y = (1)^2 - 9$$

$$y = (1)(1) - 9$$

$$y = 1 - 9$$

$$y = -8$$

x	y
0	-8
1	-9
2	-8

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