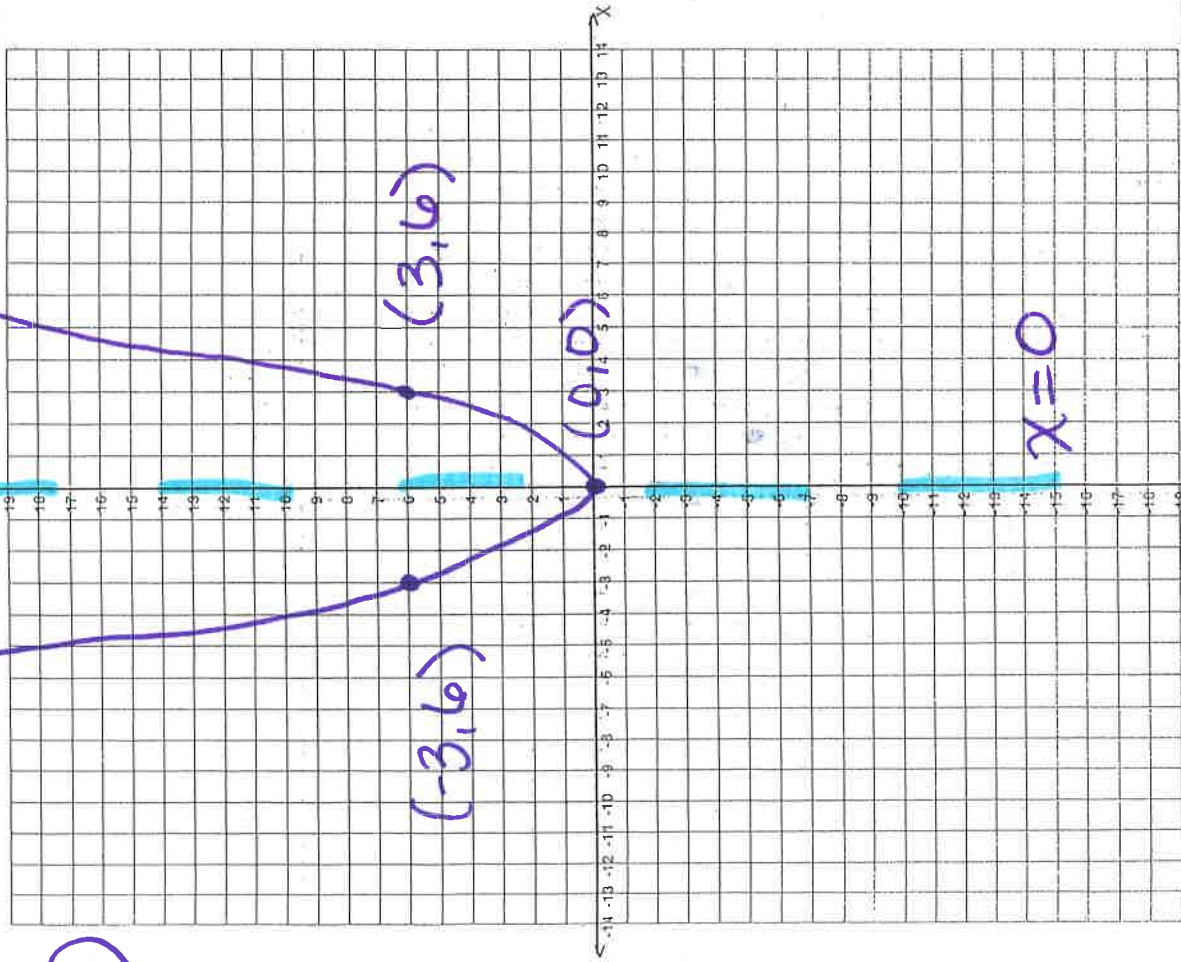


TEST Review pg. 604: #5-11,
pg. 575 #11-21, pg. 605 #39-49
* only odds

5)

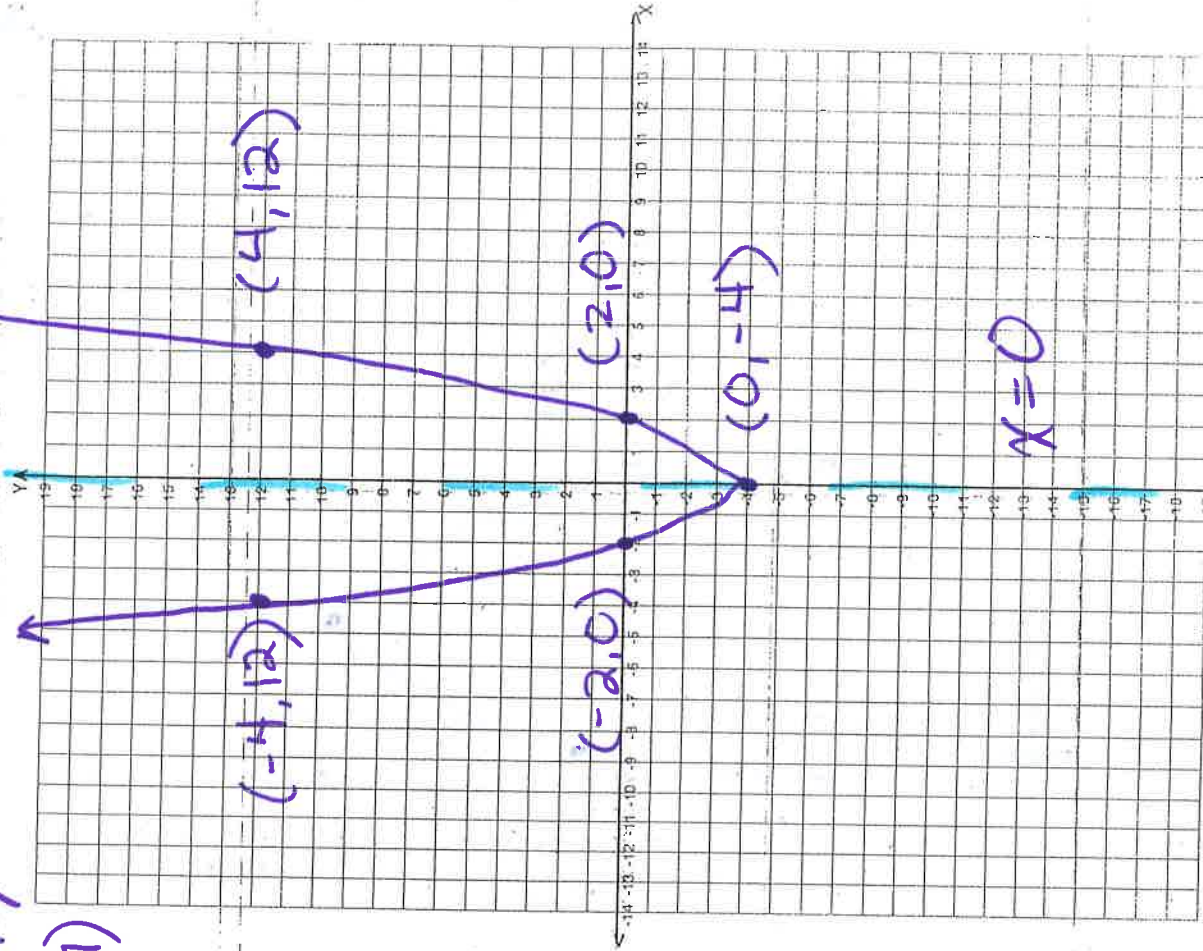


$$y = \frac{2}{3}x^2$$

x	y
-3	6
0	0
3	6

Math-Aids.Com

7)

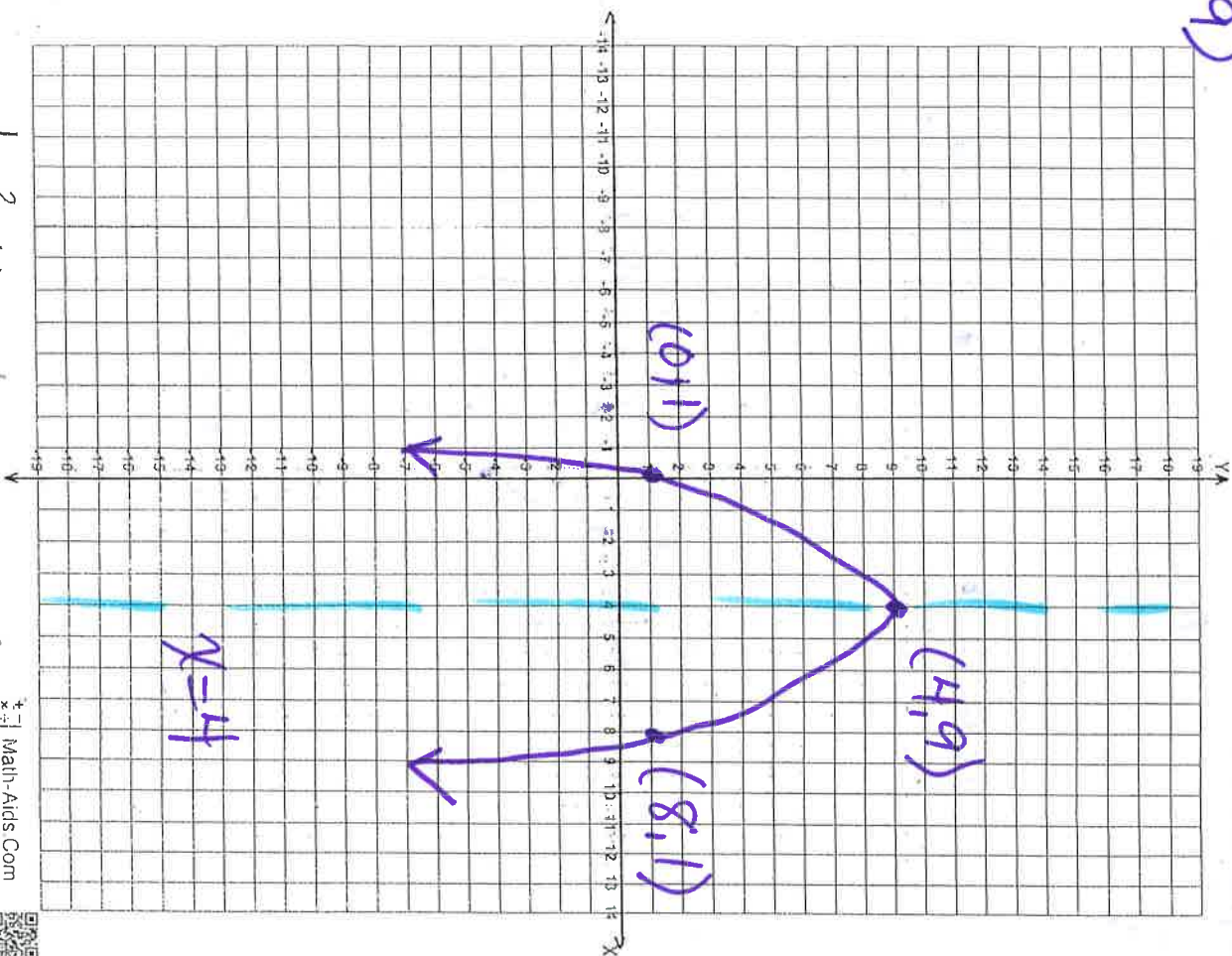


$$y = x^2 - 4$$

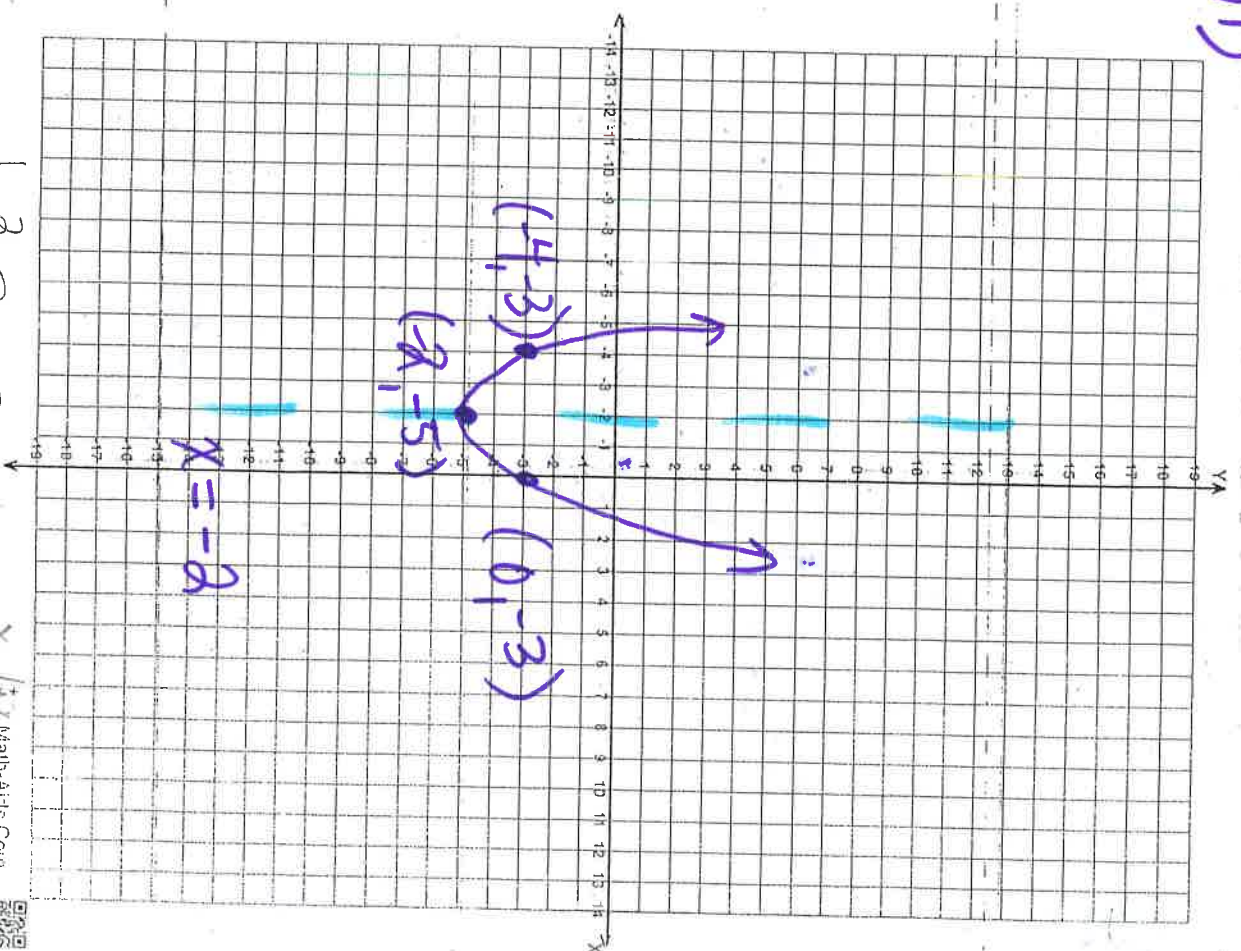
x	y
-4	12
-2	0
0	-4
2	0
4	12

Math-Aids.Com

9)



11)



$$y = \frac{1}{2}x^2 + 4x + 1$$

$$x = \frac{-b}{2a} = \frac{-4}{2(\frac{1}{2})} = \frac{-4}{-1} = 4$$

	x	y
	0	1
	4	9
	8	1

Math-Aids Com

$$y = \frac{1}{2}x^2 + 2x - 3$$

$$x = \frac{-b}{2a} = \frac{-2}{2(\frac{1}{2})} = \frac{-2}{1} = -2$$

	x	y
	0	-3
	-2	-5
	-4	-3

Math-Aids Com

pg. 575 #11-21 odd

11) $x^2 + 9 = 0$

$-9 -9$

$x^2 = -9$

$\sqrt{x^2} = \sqrt{-9}$

No solution

13) $m^2 = 81$

$m = \pm 9$

Two solutions

15) $5r^2 - 180 = 0$

$+180 +180$

$5r^2 = 180$

5

$r^2 = 36$

$r = \pm 6$

two solutions

17) $A = \pi r^2$

$324 = \pi r^2$

π

$r^2 = 103.1$

$r = 10.2 \text{ ft}$

19) $n^2 + n - 12 = 0$

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

$n+4=0$

or $n-3=0$

$-4 -4$

$+3 +3$

$n = -4$

or

$n = 3$

$$21) \begin{array}{l} t^2 - 3t = 28 \\ -28 \quad -28 \end{array}$$

$$\begin{array}{l} t^2 - 3t - 28 = 0 \\ (t + 4)(t - 7) = 0 \end{array}$$

$$\begin{array}{ll} t + 4 = 0 & t - 7 = 0 \\ -4 \quad -4 & +7 \quad +7 \\ \hline t = -4 \text{ or } t = 7 \end{array}$$

pg. 605 #39-49

39) Discriminant = $b^2 - 4ac$

$$3x^2 - 2 = 5x$$
$$-5x \quad -5x$$

$$3x^2 - 5x - 2 = 0$$

$$a = 3$$

$$b = -5$$

$$c = -2$$

$$b^2 - 4ac$$
$$(-5)^2 - 4(3)(-2)$$
$$25 + 24$$

$$49$$

positive

Two solutions

41) $2x^2 - 3x = 20$

$$-20 \quad -20$$

$$2x^2 - 3x - 20 = 0$$

$$a = 2$$

$$b = -3$$

$$c = -20$$

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

$$x = \frac{-(-3) \pm \sqrt{(-3)^2 - 4(2)(-20)}}{2(2)}$$

$$x = \frac{3 \pm \sqrt{169}}{4}$$

$$x = \frac{3 \pm 13}{4}$$

$$x = \frac{3+13}{4}$$

OR

$$x = \frac{3-13}{4}$$

$$x = 4$$

$$\text{OR } -2.5$$

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

$$43) 64x^2 + 12x - 1 = 0$$

$$a = 64$$

$$b = 12$$

$$c = -1$$

$$x = \frac{-12 \pm \sqrt{(-12)^2 - 4(64)(-1)}}{2(64)}$$

$$x = \frac{-12 \pm \sqrt{400}}{128}$$

$$x = \frac{-12 + 20}{128}$$

$$x = \frac{-12 - 20}{128}$$

$$x = -0.06 \text{ OR } -0.25$$

$$45) x^2 - 6x + 9 = 0$$

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

$$x - 3 = 0$$

$$+3 +3$$

$$x = 3$$

* Factoring, because this is a perfect trinomial square.

$$47) \begin{array}{c|c} x & y \\ \hline -3 & 0 \\ 1 & 4 \\ -1 & 6 \\ 2 & 0 \end{array}$$

Reflection
pts.

Quadratic

$$49) \begin{array}{c|c} x & y \\ \hline -1 & -5 \\ 0 & -2 \\ 1 & 1 \\ 2 & 4 \\ 3 & 7 \end{array}$$

$$y = 3x + 2$$