

UNIT 8 DAY 1 - HOMEWORK

Name Key

Solve using Graphing by hand:

1) $x^2 - 2x - 3 = 0$

Max or Min:

Vertex: (1, -4)

y-intercept: (0, -3)

x-intercepts: (3, 0) and (-1, 0)

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

$$(1)^2 - 2(1) - 3$$

$$1 - 2 - 3$$

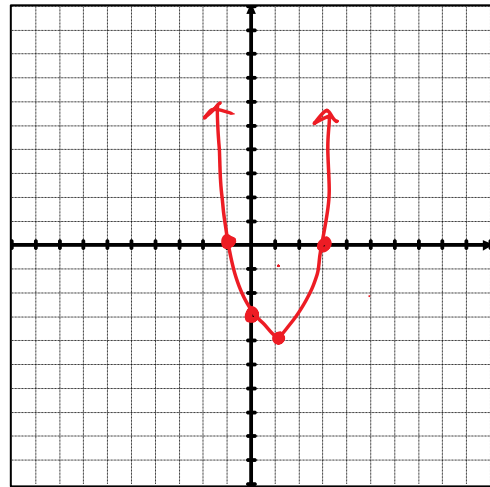
$$1 - 5$$

$$-4$$

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

$$(x - 3)(x + 1) = 0$$

$$x = 3 \quad x = -1$$



2) $x^2 - 4x + 3 = 0$

Max or Min:

Vertex: (2, -1)

y-intercept: (0, 3)

x-intercepts: (3, 0) and (1, 0)

$$x^2 - 4x + 3 = 0$$

$$(x - 3)(x - 1) = 0$$

$$x = 3 \quad x = 1$$

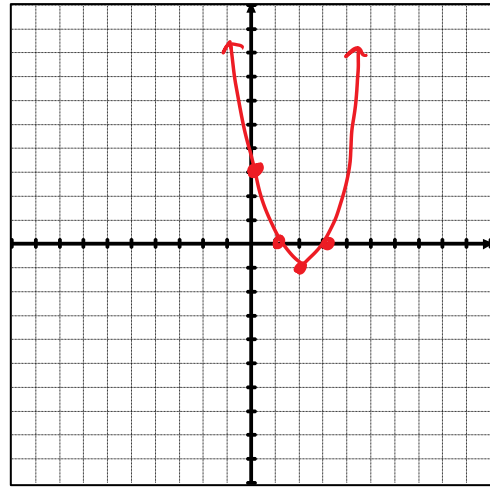
$$\frac{4}{2(1)} = 2$$

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

$$4 - 8 + 3$$

$$-4 + 3$$

$$-1$$



3) $x^2 + 2x - 8 = 0$

Max or Min:

Vertex: (-1, -9)

y-intercept: (0, -8)

x-intercepts: (-4, 0) and (2, 0)

$$(-1)^2 + 2(-1) - 8$$

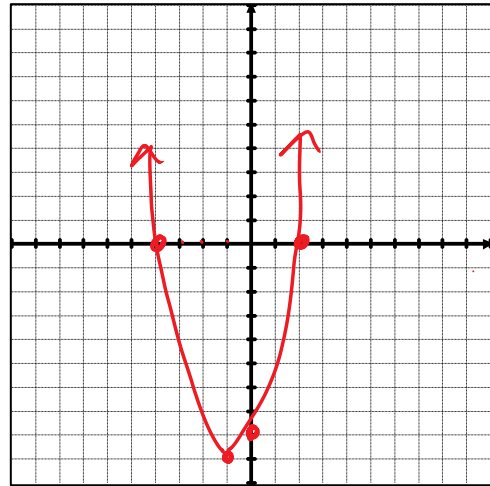
$$1 - 2 - 8 = -9$$

$$-\frac{2}{2} = -1$$

$$x^2 + 2x - 8 = 0$$

$$(x + 4)(x - 2) = 0$$

$$x = -4 \quad x = 2$$



Solve using Graphing using the Calculator:

4) $x^2 - 8x - 3 = 0$

(-0.36, 0)
(8.36, 0)

5) $2x^2 - 6x + 1 = 0$

$2x^2 - 6x + 1 = 0$
(.17, 0) and (2.82, 0)

