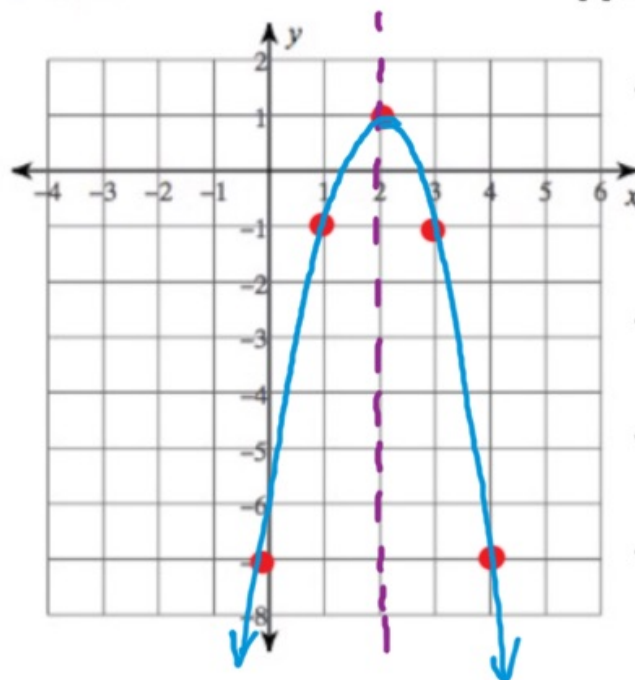


Math II

Graphing Quadratics in Standard Form

1)  $f(x) = -2x^2 + 8x - 7$

A = -2    B = 8    C = -7



• Up or Down? **Down**

• Vertex? **(2, 1)**

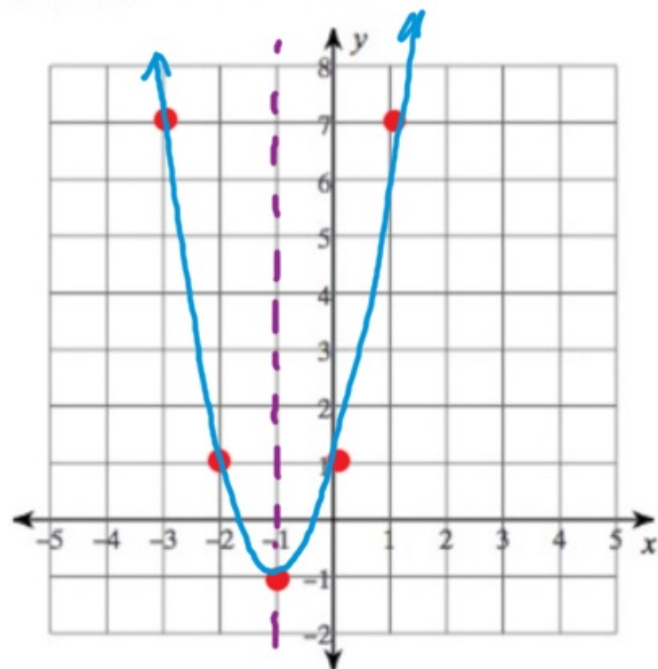
• Line of Symmetry? **x = 2**

• Y - Intercept? **(0, -7)**

• Strategic Points?

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

A = 2    B = 4    C = 1



- Up or Down? **up**
- Vertex?  **$(-1, -1)$**
- Line of Symmetry?  **$x = -1$**
- Y - Intercept?  **$(0, 1)$**
- Strategic Points?

2 of 4
Math II
Graphing Quadratics in Standard Form

3)  $f(x) = -x^2 + 4x$

A = -1    B = 4    C = 0

- Up or Down? **Down**
- Vertex? **(2, 4)**
- Line of Symmetry? **x = 2**
- Y - Intercept? **(0, 0)**
- Strategic Points?

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4)  $f(x) = x^2 - 2x - 3$

A = \_\_\_\_\_    B = \_\_\_\_\_    C = \_\_\_\_\_

2 of 4

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4)  $f(x) = x^2 - 2x - 3$

$A = \underline{1}$     $B = \underline{-2}$     $C = \underline{-3}$

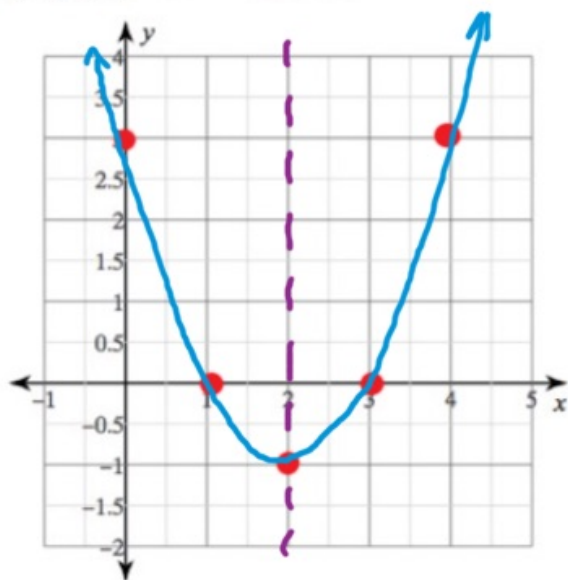
- Up or Down? *up*
- Vertex? *(1, -4)*
- Line of Symmetry? *x = 1*
- Y - Intercept? *(0, -3)*
- Strategic Points?

*✓*

Math II

Graphing Quadratics in Standard Form

5)  $f(x) = x^2 - 4x + 3$

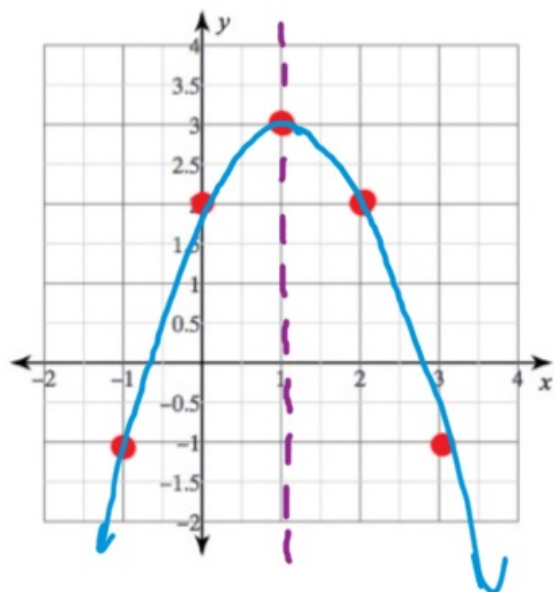


A = 1    B = -4    C = 3

- Up or Down? UP
- Vertex? (2, -1)
- Line of Symmetry? x = 2
- Y - Intercept? (0, 3)
- Strategic Points?

6)  $f(x) = -x^2 + 2x + 2$

A = -1    B = 2    C = 2



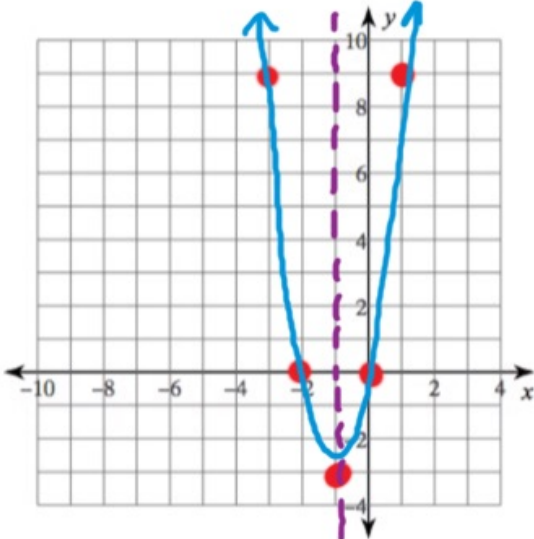
- Up or Down? **down**
- Vertex? **(1,3)**
- Line of Symmetry?  **$x=1$**
- Y - Intercept? **(0,2)**
- Strategic Points?



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Math II
Graphing Quadratics in Standard Form

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

$Ax^2 + Bx + C$



**A = 3    B = 6    C = 0**

- Up or Down? **up**
- Vertex?  **$(-1, -3)$**
- Line of Symmetry?  **$x = -1$**
- Y - Intercept?  **$(0, 0)$**
- Strategic Points?

$\frac{-B}{2A} \rightarrow \frac{-6}{2(3)} \rightarrow -1$

$f(-1) = 3(-1)^2 + 6(-1)$

$= 3 - 6 = -3$

✓

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8)  $f(x) = \frac{1}{2}x^2 - 2x - 2$

**A = \_\_\_\_\_    B = \_\_\_\_\_    C = \_\_\_\_\_**

8)  $f(x) = \frac{1}{2}x^2 - 2x - 2$

$A = \underline{\frac{1}{2}}$     $B = \underline{-2}$     $C = \underline{-2}$

- Up or Down? **up**
- Vertex? **(2, -4)**
- Line of Symmetry? **x = 2**
- Y - Intercept? **(0, -2)**
- Strategic Points?

$\frac{-B}{2A} \rightarrow \frac{-(-2)}{2(\frac{1}{2})} \rightarrow 2$   
 $\frac{1}{2}(2)^2 - 2(2) - 2 = -4$   
 $x - 4 - 2 = -4$

✓