Given the equation $y = x^2 - 2x - 8$, state the y - intercept of the parabola it represents
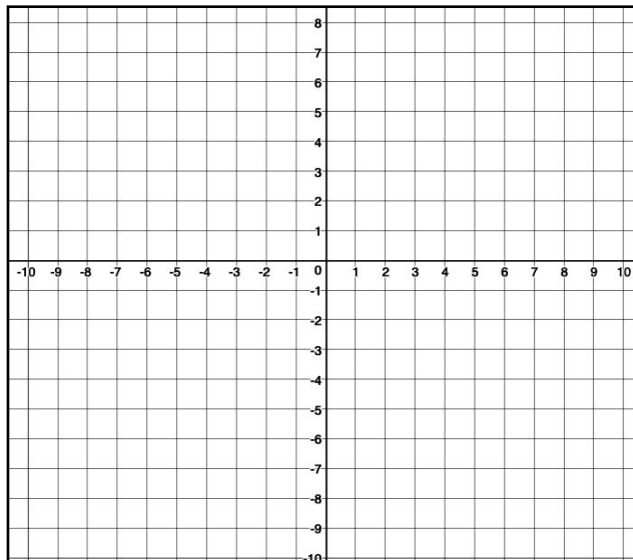
- **Y - intercept is:** _____

Next, put the equation in **vertex form** by **completing the square**. From that form, state the vertex of the the parabola.

- **The Vertex Form is:** _____

- **The Vertex Point is:** _____

Lastly, using what you know about graphing techniques practiced in class, sketch a graph of the parabola to right, using the information you obtain from the both forms of the equations.

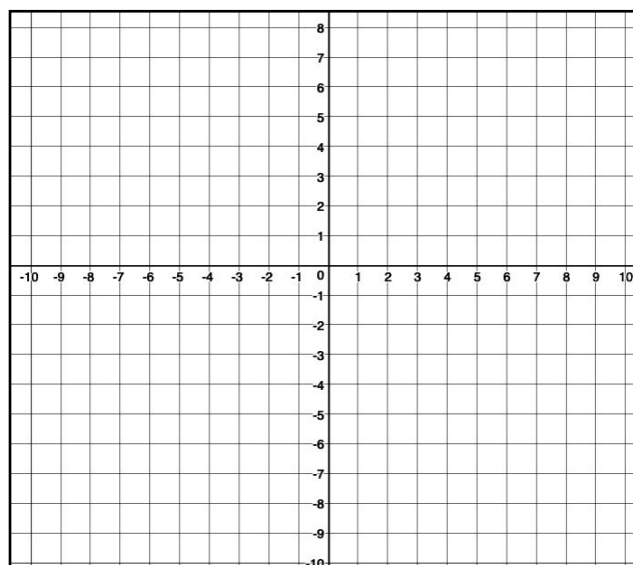Given the equation $y = x^2 + 7x + 5$, state the y - intercept of the parabola it represents

- **Y - intercept is:** _____

Next, put the equation in **vertex form** by **completing the square**. From that form, state the vertex of the the parabola.

- **The Vertex Form is:** _____

- **The Vertex Point is:** _____

Lastly, using what you know about graphing techniques practiced in class, sketch a graph of the parabola to right, using the information you obtain from the both forms of the equations.

Given the equation $y = 2x^2 + 8x - 1$, state the y - intercept of the parabola it represents
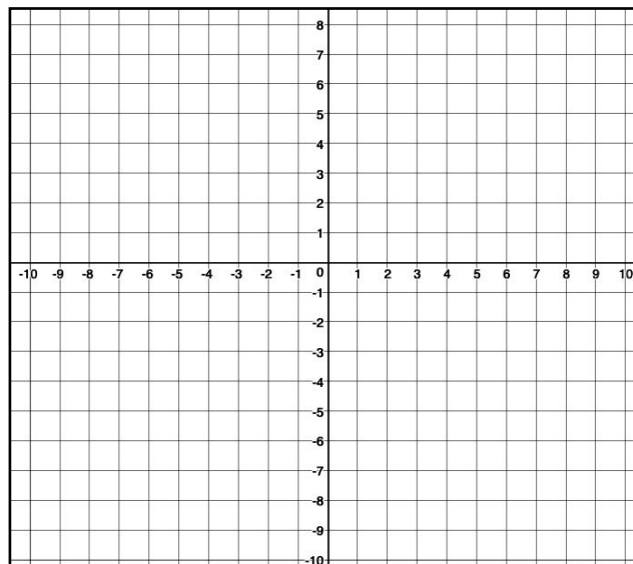
- *Y - intercept is:* _____

Next, put the equation in **vertex form** by **completing the square**. From that form, state the vertex of the the parabola.

- *The Vertex Form is:* _____

- *The Vertex Point is:* _____

Lastly, using what you know about graphing techniques practiced in class, sketch a graph of the parabola to right, using the information you obtain from the both forms of the equations.

Given the equation $y = 3x^2 - 12x + 4$, state the y - intercept of the parabola it represents
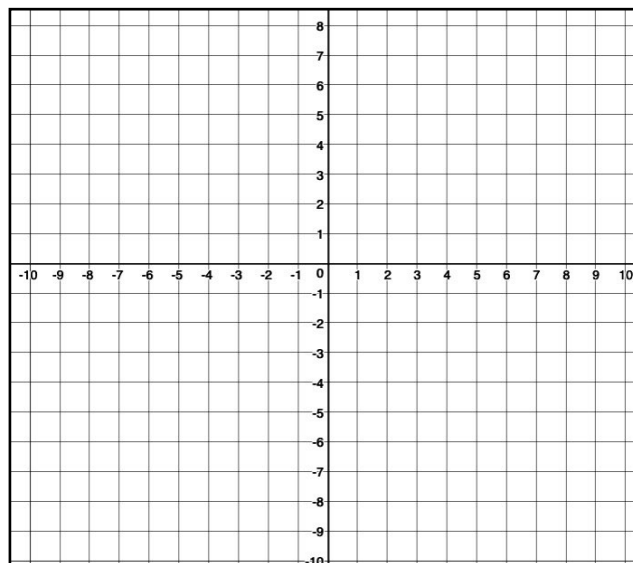
- *Y - intercept is:* _____

Next, put the equation in **vertex form** by **completing the square**. From that form, state the vertex of the the parabola.

- *The Vertex Form is:* _____

- *The Vertex Point is:* _____

Lastly, using what you know about graphing techniques practiced in class, sketch a graph of the parabola to right, using the information you obtain from the both forms of the equations.

1. $f(x) = x^2 - 2x - 8$

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

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

4. $f(x) = x^2 + 4x + 10$

5. $f(x) = 2x^2 - 12x + 6$

6. $f(x) = x^2 + 3x - 18$

7. $f(x) = x^2 - 4x + 8$

8. $f(x) = 2x^2 - 12x + 16$

9. $f(x) = 3x^2 + 9x + 3$

10. $f(x) = x^2 - x + 5$

11. $f(x) = 3x^2 + 9x + 6$

12. $f(x) = x^2 - 4x + 4$

13. $f(x) = x^2 + 8x - 4$

14. $f(x) = x^2 + 2x - 1$

15. $f(x) = x^2 + 6x + 3$

1	2	3
4	5	6
7	8	9
10	11	12
13	14	15