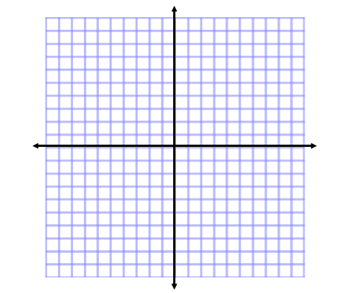
**Zeroes of Quadratic Functions**

Name:

Solving Quadratics Functions Day 2

Students can:

* Identify zeroes of a factored, quadratic polynomial.
* Use the given zeroes to **sketch** a graph of a quadratic function.

**WARM-UP:**

Solve for the roots of the quadratic functions and sketch the graph.

1. x2 + 9x + 20 2. 9x2 – 12x + 4

**MINI LESSON:**

**Solve for the x-intercepts for the following quadratic functions. Then sketch the graph.**

3. 4.

5. 6.

7. How many solutions does each quadratic function have in #3 and #4? \_\_\_\_\_\_\_\_\_\_\_

How about in #5 and #6? \_\_\_\_\_\_\_\_\_\_\_

8. Sketch a quadratic function that has exactly two solutions.



9. Sketch a quadratic function that has exactly one solution.



10. Sketch a quadratic function that has exactly no solutions.



We can determine the number of solutions a quadratic function has by finding the **discriminant**. We will practice this next week!

11. T or F? If a quadratic is factorable then it has one or two zeroes.

12. If a quadratic function has exactly one solution, then the solution is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of the parabola.

**WORKSHOP:**

**Solve for the x-intercepts for the following quadratic functions. Then sketch the graph.**

13. 14.

15. 16.