1. a) How do you know if an equation b) Circle all the equations below that will graph

will graph as a parabola? as a parabola.

2. Rewrite the following quadratic equation 3. Multiply:

in standard form:

4. Identify the vertex of the function: 5. Identify the roots of the function: .

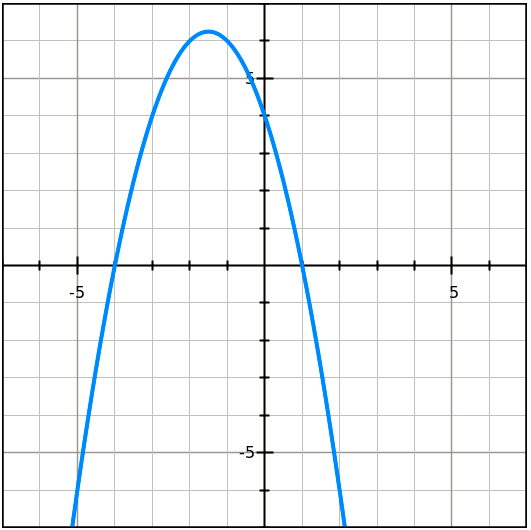
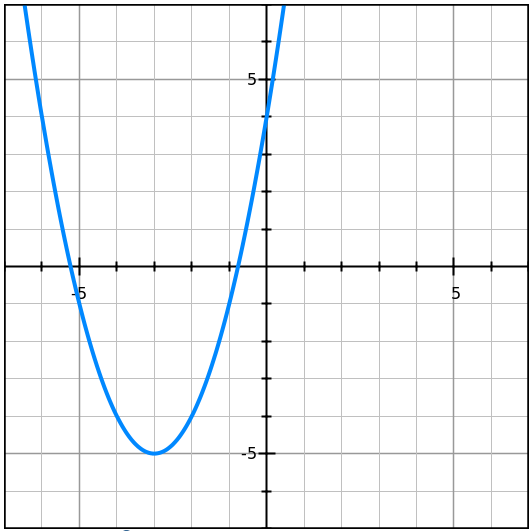
6. If a parabola opens down and has a vertex 7. A parabola is known to have 2 roots and a vertex

of (3, -5), how many roots will it have? at (3, -5). If one *x*-intercept is at the at (1, 0),

what are the coordinates of other *x*-intercept?

8. Write 3 equations (one in each form) 9. Write 3 equations (one in each form)

for the given parabola: for the given parabola:

Vertex Form: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Vertex Form: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Factored Form: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Factored Form: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Standard Form: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Standard Form: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

10. Factor: 11. Factor:

12. Factor: 13. Factor:

**Work Space:** Here are some spare coordinate grids to work out problems if needed:

