

Name: _____

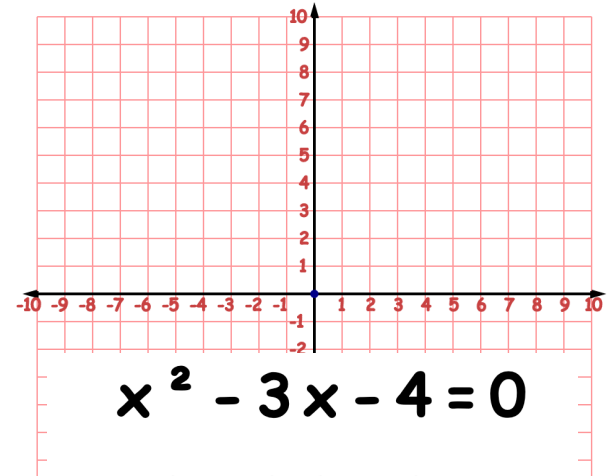
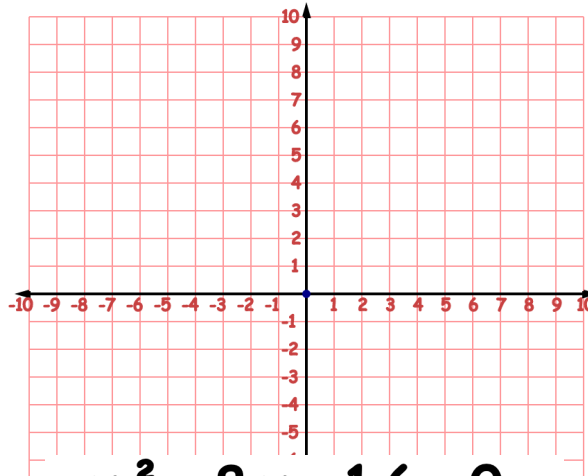
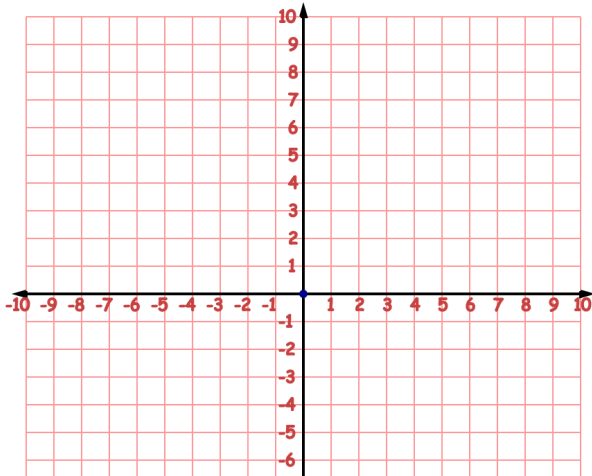
Period: _____

Factor and solve equations find: Roots, Axis of Symmetry, Vertex, Make Data Table with 5 Points and Graph Parabolas

$$y = x^2 + 2x + 5$$

$$y = x^2 - 8x + 16$$

$$y = x^2 - 3x - 4$$



$$x^2 + 2x + 5 = 0$$

$$x^2 - 8x + 16 = 0$$

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

$$(x - 4)(x + 1) = 0$$

$$(x - 4) = 0 \text{ or } (x + 1) = 0$$

No numbers add to 2 and multiply to 5

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

$$X = 4 \text{ or } X = -1$$

So X must equal 4 → Graph Double Root

