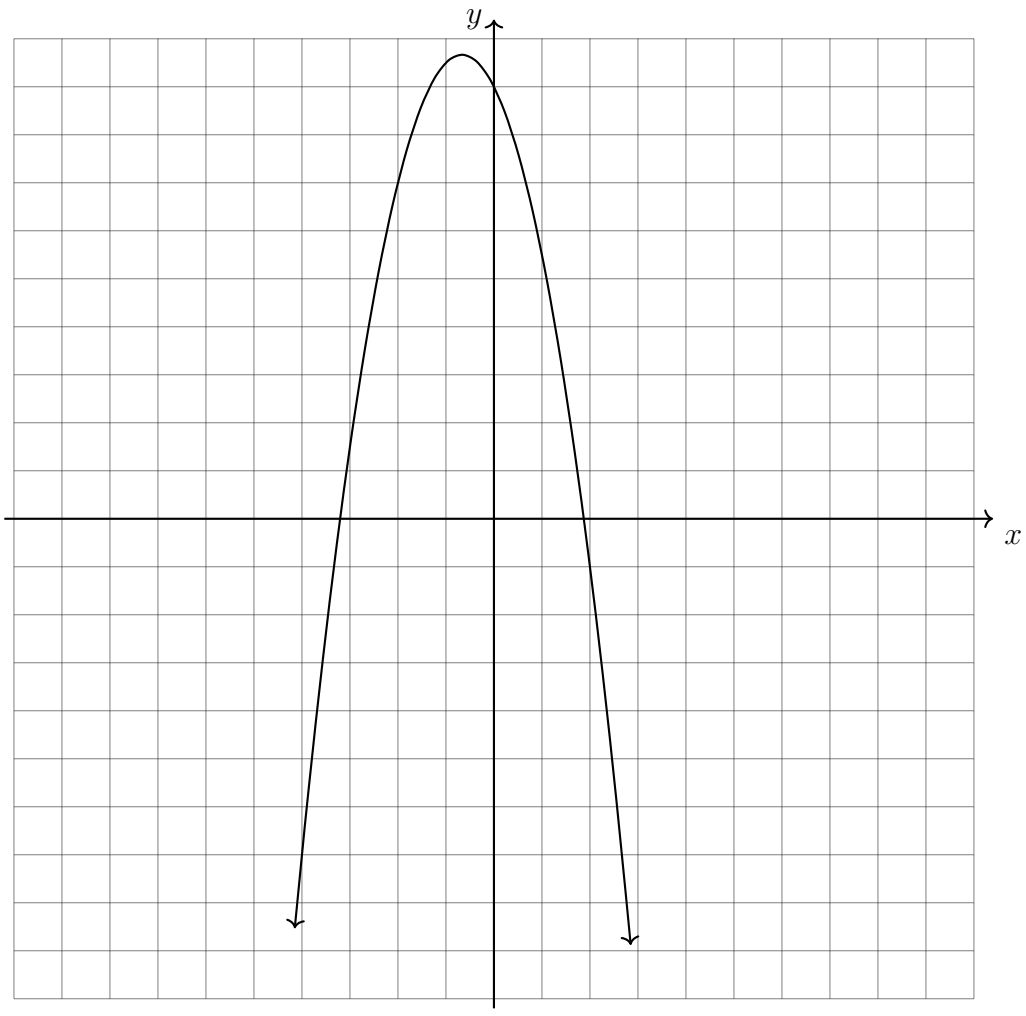
BECA / Dr. Huson / Regents Prep: Graphs First and last name:
15 November 2024 Section:

3.3 Do Now: Graphing quadratic systems

1. One equation of a system is graphed. Graph the second equation, labeling the intersections as ordered pairs.

   $y = ax^2 - 2x + 9$ $2x + y = 3$

   Find the value of the leading coefficient a of the quadratic equation.



2. Identify the expressions that are equal to $\dfrac{2^2}{2^4}$

   (a) 2^6

   (b) $\dfrac{1}{2^2}$

   (c) 2^{-2}

   (d) $\frac{1}{4}$

   (e) 2^2

   (f) 0.5

3. Identify the expressions that are equal to 2^{-3}

   (a) 2.333...

   (b) $\sqrt{2}$

   (c) $\dfrac{1}{2^3}$

   (d) $\dfrac{1}{8}$

   (e) 6

   (f) 0.125

4. Identify the expressions that are equal to $9^{\frac{1}{2}}$

   (a) 9.5

   (b) $\sqrt{3}$

   (c) $\sqrt{9}$

   (d) 3

   (e) 81

   (f) 4.5

5. Evaluate each polynomial for the given value of x.

   (a) $f(x) = -x^3 + 12x^2 - x + 4$

   $f(0) =$

   (b) $g(x) = 2x^3 + 4x^2 - 3x + 4$

   $g(1) =$

6. Find all values of x that make the equation true.

$$x - 1 = \frac{12}{x}$$