

Part 2:

Each answer needs to be typed below and entered in Socrative.

1. Using Google or your favorite search engine or previous knowledge, find out what a y-intercept is. Type a sentence explaining and include pictures if you need.
2. Using Google or your favorite search engine or previous knowledge, find out how to find a y-intercept both from a graph and an equation. Type a sentence explaining. You may include an example or picture if that is helpful to you.
3. What is the y-intercept of $y = 3x - 2$?
4. What is the y-intercept of $y = \frac{2x - 3}{x - 2}$?
5. Some rational functions have "holes" in their graphs. How would you find out what the "holes" are of a rational function if any? Type a sentence explaining.

When your group gets here stop and check with Mrs. Houck before moving on!

Practice – TURN IN FOR A GRADE!!!

Find the y-intercepts for the functions.

a) $f(x) = \frac{2x-5}{x+3}$

b) $f(x) = \frac{2}{x-9}$

c) $f(x) = \frac{x^2+4}{4x-1}$

d) $f(x) = \frac{x^2-16}{2}$

e) $f(x) = \frac{x+5}{x^2-x-12}$

f) $f(x) = \frac{x-3}{x^2-16}$

Find the holes of the functions.

a)
$$\frac{x+5}{(x+3)(x+5)}$$

b)
$$f(x) = \frac{(x+3)(x+4)(x+5)}{(x+4)(x+5)(x+6)(x+7)}$$

c)
$$f(x) = \frac{x^2-5x+6}{x-3}$$