

MA 109: September 6

Linear Functions: Slope

Start of Class

Instructor Information

Name:

Email:

Office Hours:

Warm-up Questions

Notes

Computing Slope

The slope of the line between the points (x_1, y_1) and (x_2, y_2) is

$$\frac{y_2 - y_1}{x_2 - x_1} \quad \text{or} \quad \frac{y_1 - y_2}{x_1 - x_2}$$

Example: Compute the slope of the line between the points $(0, 5)$ and $(3, -4)$.
 x_1 y_1 x_2 y_2

$$\frac{(-4) - (5)}{(3) - (0)} = \frac{-4 - 5}{3 - 0} = \frac{-9}{3} = \boxed{-3}$$

What if we flip the order?

$$\frac{(5) - (-4)}{(0) - (3)} = \frac{5 - -4}{0 - 3} = \frac{5 + 4}{-3} = \frac{9}{-3} = \boxed{-3}$$

Same answer!

End of Class

Write a summary of what you learned today:

What questions do you have about the material from today?

What do you need to do between now and the next class meeting?