Agenda

Homework:

- **Study Guide**
- **Linear Equations TEST on Wed/ Thurs**
- **AM**

Materials:

- **Math notebook**

Do Now:

- Take out homework
- On your desk:

1. Find the **slope** between the points (4, 12) & (-1, 16)
2. Find the slope-intercept equation for the following table:

x	y
2	1
4	4
6	7

Do Now

- Find the **slope** between the points (4, 12) & (-1, 16)

$-\frac{4}{5}$

$x_1\ y_1 \qquad x_2\ y_2$

$\frac{y_2 - y_1}{x_2 - x_1} = \frac{16 - 12}{-1 - 4} = \frac{4}{-5}$

- Find the slope-intercept equation for the following table:

x	y
2	1
4	4
6	7

$0 \quad -2$

$+2 \qquad +3$

2

$y = \frac{3}{2}x - 2 \qquad y = ? \qquad -?$

Set Up Cornell Notes

- **Topic:** Linear Equations: 2 Points
- **EQ:** How do you construct an equation in slope-intercept from given 2 coordinates?

- Update Table of Contents

1/25/16 (Pd 1 & 2) 1/26/16 (Pd 4)	Linear Equations: 2 Points

How do you create a linear equation given 2 coordinates?

Example: (-3, 0) & (0, 5)

x_1 y_1 x_2 y_2

$y = mx + b$

slope y-int

Steps:

① Calculate the slope (m):

$$\frac{y_2 - y_1}{x_2 - x_1} = \frac{5 - 0}{0 - -3} = \frac{5}{3}$$

② Identify the y-int (b): 5

Circle the coordinate where x = 0

③ Plug in to y = m x + b

Practice

(0, 7) & (3, 5)

$x_1\ y_1 \quad x_2\ y_2$

$\frac{y_2 - y_1}{x_2 - x_1} \quad \frac{5-7}{3-0} = \frac{-2}{3}$

$y = -\frac{2}{3}x + 7$

(-4, 0) & (0, 2)

$\frac{2-0}{0+4} = \frac{2}{4} = \frac{1}{2}$

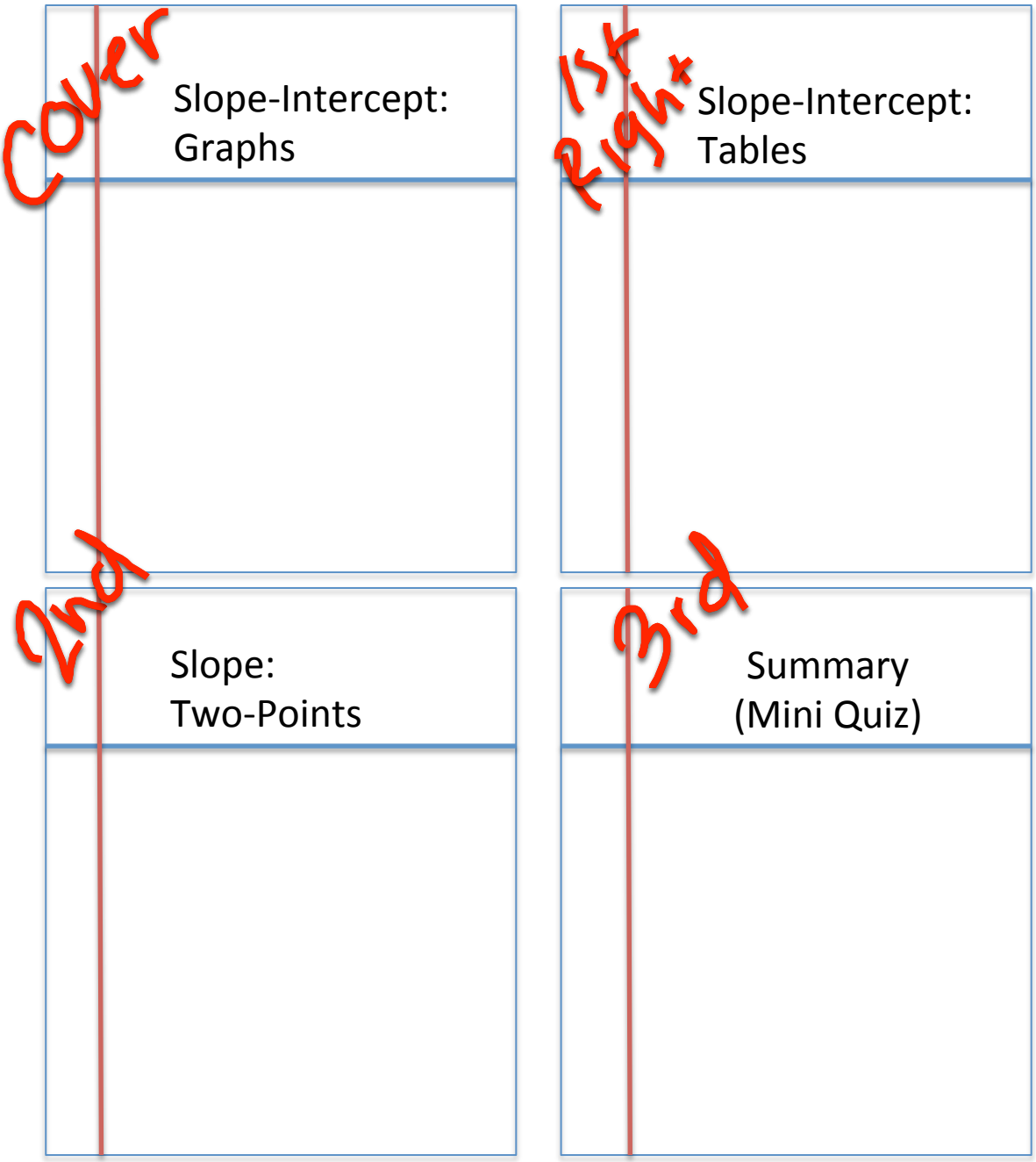
$y = \frac{1}{2}x + 2$

Slope-Intercept Foldable

① Stack two pieces of paper on each other

② Fold the 2 pieces of paper in half together (Hamburger Style)

③ Staple along the creased edge to create a four page book



Cover
Slope-Intercept:
Graphs

1st Inside Page
Slope-Intercept:
Tables

2nd Page:
Slope: Two-Points

Last Page:
Summary