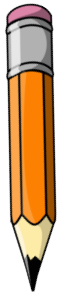## Agenda:

1. Topic 2-4 (part 1)

Today you will need:

> a calculator
> pencil

Housekeeping:

1. Topic 1 retake deadline: 10-6 (next Friday)

Assignments this unit:
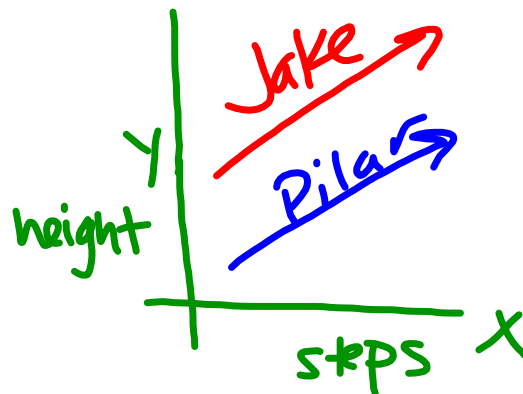
> MathXL 2-1 (past due)
> yellow WS (late- try ASAP)
> green WS (late- try ASAP)

Pilar and Jake begin climbing to the top of a 100-ft monument at the same time along two different sets of steps at the same rate. The tables show their distances above ground level after a number of steps.
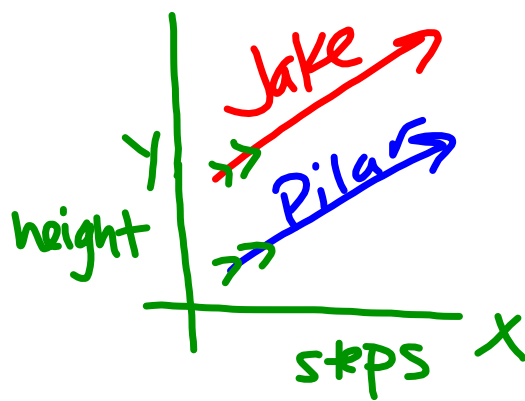
Pilar

x steps	1	3	17	25
y height (ft)	2	3	10	14

Jake

x steps	1	7	15	29
y height (ft)	5	8	12	19

A. How many feet does each student climb after 10 steps? Explain.

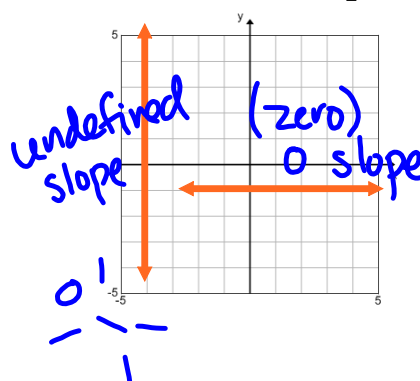**B.** Will Pilar and Jake be at the same height after the same number of steps? Explain.
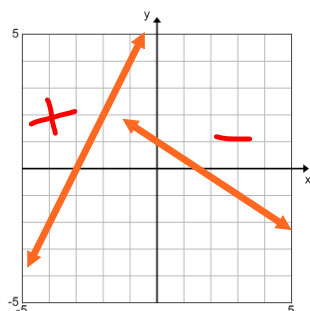
What was the intention behind the warm up?

2-4: Slopes of Parallel and Perpendicular Lines

Review of slopes: Slope = $\dfrac{↕ \ rise}{↔ \ run}$ or $\dfrac{y_2 - y_1}{x_2 - x_1}$

$+$ $-$

undefined slope   (zero) 0 slope

0 | −

Slope = $\dfrac{rise}{run}$ or $\dfrac{y_2 - y_1}{x_2 - x_1}$

Find the slope of the line through the points given.

(2, -3) and (4, 5)

x_1, y_1 x_2, y_2

Slope = $\dfrac{y_2 - y_1}{x_2 - x_1}$

$= \dfrac{5 + 3}{4 - 2}$

$= \dfrac{8}{2} \rightarrow \boxed{4}$ slope

(-3, -6) and (-1, 2)

$\dfrac{2 - -6}{-1 - -3} = \dfrac{8}{2}$

$\boxed{4}$

Find the slope of each line.

$+2$ $+3$ -3 -2 $+3$
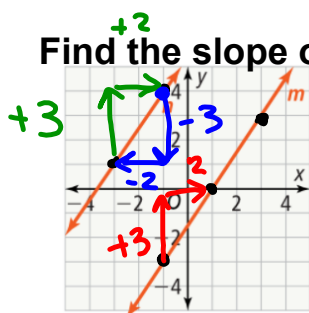
Slope of n: $\dfrac{3}{2}$

$\dfrac{-3}{-2} = \dfrac{3}{2}$
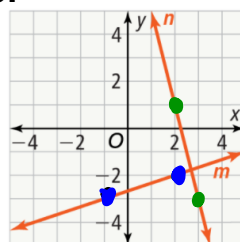
Slope of m: $\dfrac{3}{2}$

Slope of n: $-\dfrac{4}{1}$

Slope of m: $\dfrac{1}{3}$

Work on the 2-4 Slope Review Worksheet

(due Tuesday)