

Good afternoon: warm up in notebooks

Determine if these equations graph lines that are parallel, perpendicular, or neither. Give numerical evidence for your claim.

$$\begin{array}{l} 4x+2y=12 \rightsquigarrow y = \boxed{-2}x + 6 \\ 4x-8y = 4 \rightsquigarrow y = \boxed{\frac{1}{2}}x - \frac{1}{2} \end{array}$$

$\frac{1}{2} \perp -2$

$-2 \cdot \frac{1}{2} = \textcircled{-1}$

Reminders:

retakes available in any DS except Weds.

Find their point of intersection.

$$4x + 2y = 12$$

$$4x - 8y = 4$$

Visibly Random Grouping

Assessments

Look over your assessments with your new neighbors
Ask questions and make corrections! Grow together

Whiteboard Math

Alternate who has the board and pen for each question
Talk about what you want to write down
Modify what you write if you disagree

Find the slope of a line passing through (3,-4) and (-2,8)

$$\frac{-12}{5}$$

$$-2.4$$

$$-2\frac{2}{5}$$

Write a linear equation with a slope of 3.

$$y = 3x + 12$$

$$2y = 6x - 4$$

$$-6x + 2y = \pi$$

Write two linear equations that graph parallel lines.

Write two equations that graph perpendicular lines.

Write two points whose slope is 4/5

$$(-2, 5)$$

$$(3, 9)$$

$$(8, 13)$$

$$\frac{4}{5} = \frac{\Delta y}{\Delta x}$$

Write an equation that is perpendicular to $2x+3y=3$
and has a y-intercept of -3.

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

$$y = 1.5x - 3$$

$$2y = 3x - 6$$

$$-3x + 2y = -6$$

Write a point that has a slope of $-\frac{3}{7}$ when connected with a line to the point $(4,2)$

$(11, -1)$

$(-3, 2)$

$$-\frac{3}{7} = \frac{\Delta y}{\Delta x}$$

$(1, 9)$

$(4, 2)$

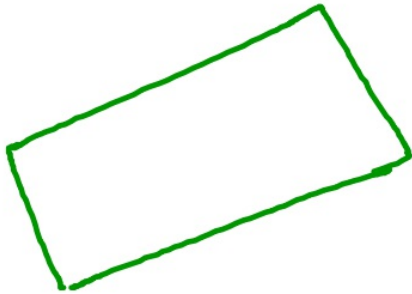
$(7, -5)$

$(-3, 5)$

One person returns board + pens to computer table

Other person recycles napkin

What is a rectangle?



A Cartesian Rectangle

Private Think Time

Interpret and Compare (trading papers, reading over work,
explaining what you read to the writer)

Hw: p. 95 #11-15