WIN week 4 Day 1 – writing and graphing equations of lines

Students will graph equations of lines.

Warm up –

1. Write the equation of a line in point slope form through (2,3) and (-4, 1).
2. Convert you equation to slope intercept form.
3. Convert you equation to standard form.
4. **Graphing equations in slope intercept form**. Steps
5. Start at the y intercept.
6. “do” the slope - $\frac{rise}{run}$.

Examples



Practice





1. **Graphing equations in point slope form.**

Two options

* Convert to slope intercept form
* OR choose the starting point $(x\_{1},y\_{1})$ and then “do” the slope

Examples:





Practice:





1. **Graphing equations in standard form.**

Two options:

* Convert to slope intercept form
* Find the x and intercept.

Examples



Practice:





WIN Week 4 Day 2

For each graph.

1. Write the equation in point slope form.
2. Convert the equation to slope intercept form.
3. Convert the equation to standard form.









Win review – writing and graphing equations of lines

1. A line has a slope of 1/3 and goes through the point (-4, 4).
	1. Write the equation of the line in point slope form.
	2. Write the equation of the line in slope intercept form.



* 1. Write the equation of the line in standard form.
	2. What is the x intercept for the line?
	3. What is the y intercept for the line?
	4. Graph the line.
1. A line is shown.
	1. What is the slope of the line?
	2. Write the equation of the line in point slope form.
	3. Write the equation of the line in slope intercept form.
	4. Write the equation of the line in standard form.
	5. What is the x intercept for the line?
	6. What is the y intercept for the line?
2. Graph each line.
3. $y=4x+1$ e. $y=-\frac{2}{5}x+2$



1. $y=\frac{1}{2}x+2$ f. $a line through \left(-2,3\right) with a slope of 2. $



1. $x=-1$ g. $y=4$



1. $2x-3y=6$ h. $3x+6y=18$

