

Please have your homework on your desk. **Calculator? Yes!**

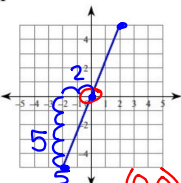
Date: _____

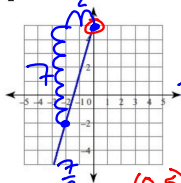
TSW graph linear inequalities.

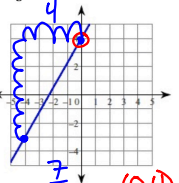
No QRQ today

Algebra 1 Make Up QUIZ (Open Notes) Name _____
 Writing Equations $y=mx+b$ Pencil Only! Date _____

Write the slope-intercept form of the equation of each line.

1  $m = -\frac{5}{2}$ $b = (0, 5)$
 Equation: $y = -\frac{5}{2}x + 5$

2  $m = -5$ $b = (0, 5)$
 Equation: $y = -5x + 5$

3  $m = -4$ $b = (0, 4)$
 Equation: $y = -4x + 4$

$\begin{matrix} + & - \\ \swarrow & \searrow \\ \leftarrow & \rightarrow \end{matrix}$

Algebra 1 CW (Open Notes) Name _____
 Equations of Lines Pencil Only! Date _____

1.) Write an equation of a line with a slope of 2 that passes through (3, -8).
 $y - y_1 = m(x - x_1)$
 $y - (-8) = 2(x - 3)$
 $y + 8 = 2x - 6$
 $y = 2x - 14$ (SF)

2.) Write an equation of a line with a slope of $-\frac{1}{2}$ that passes through (10, -3).
 $y - y_1 = m(x - x_1)$
 $y - (-3) = -\frac{1}{2}(x - 10)$
 $y + 3 = -\frac{1}{2}x + 5$
 $y = -\frac{1}{2}x + 2$ (SF)

3.) Write an equation of a line that passes through the points (1, 2) and (1, -3).
 $M = \frac{y_2 - y_1}{x_2 - x_1} = \frac{-3 - 2}{1 - 1} = \frac{-5}{0} = \text{undefined}$
 $y - y_1 = m(x - x_1)$
 $y - 2 = \text{undefined}(x - 1)$
 $y = 2$ (SF)

4.) Write an equation of a line that passes through the points (0, 1) and (3, -1).
 $M = \frac{y_2 - y_1}{x_2 - x_1} = \frac{-1 - 1}{3 - 0} = \frac{-2}{3}$
 $y - y_1 = m(x - x_1)$
 $y - 1 = -\frac{2}{3}(x - 0)$
 $y - 1 = -\frac{2}{3}x$
 $y = -\frac{2}{3}x + 1$ (SF)

$3(\frac{2}{3}x + 1) = (1)(3)$
 $2x + 3 = 3$ (SF)

Horizontal/Vertical Inequalities.

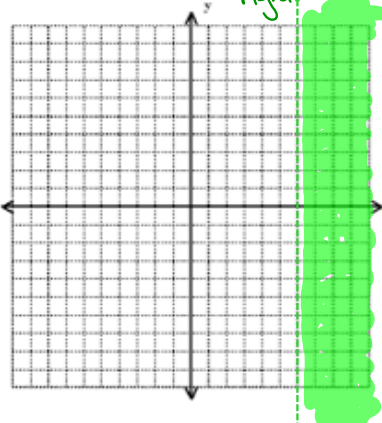
> Is Greater Than
 Dashed Graph
 Shade To The Right or Above Graph

< Is Less Than
 Dashed Graph
 Shade to the Left or Below Graph

≥ Is Greater Than or Equal To
 Solid Graph
 Shade To The Right or Above

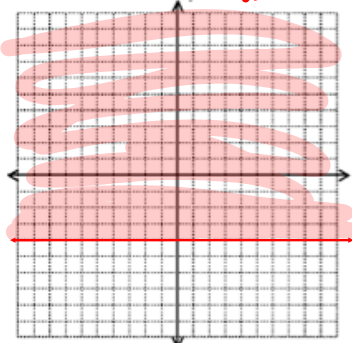
≤ Is Less Than or Equal To
 Solid Graph
 Shade to the Left or Below Graph

Ex1 $x > 6$ dotted shade right.

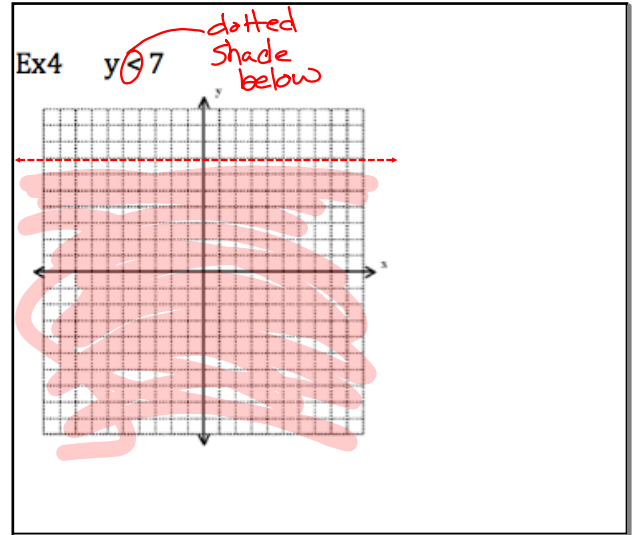
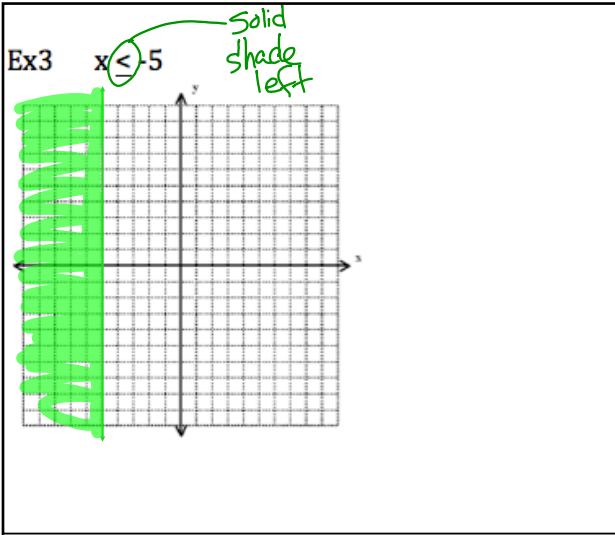


Vertical defined

Ex2 $y \geq -4$ Solid shade above



Horizontal
 slope
 $y = \#$



$y < mx + b$	$y \leq mx + b$
Is Less Than	Is Less Than or Equal To
Dashed Graph	Solid Graph
Shade Below Graph	Shade Below Graph
$y > mx + b$	
Is Greater Than	
Dashed Graph	
Shade Above Graph	
$y \geq mx + b$	
Is Greater Than or Equal To	
Solid Graph	
Shade Above Graph	

