

Lines: Lesson 5

Standard Form: Worksheet 1

Name: Answer key!



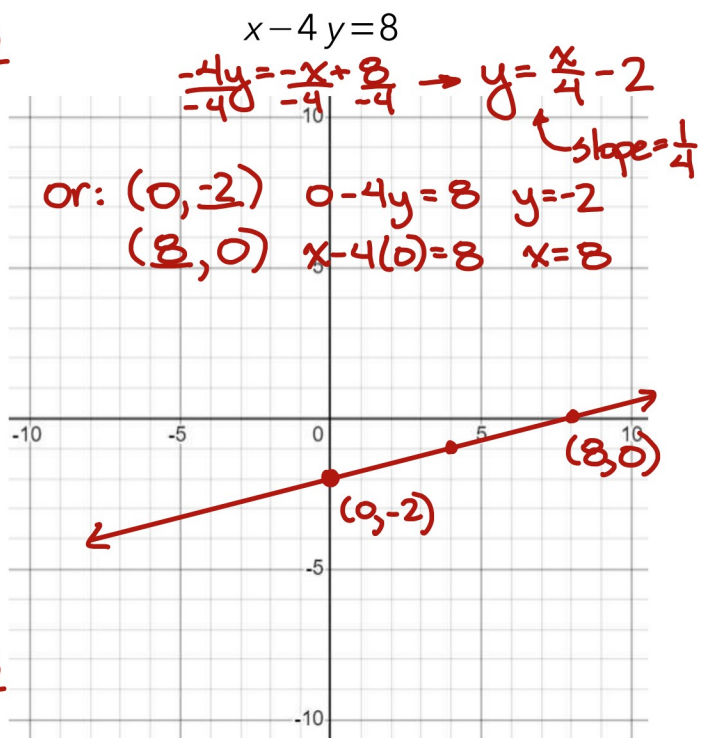
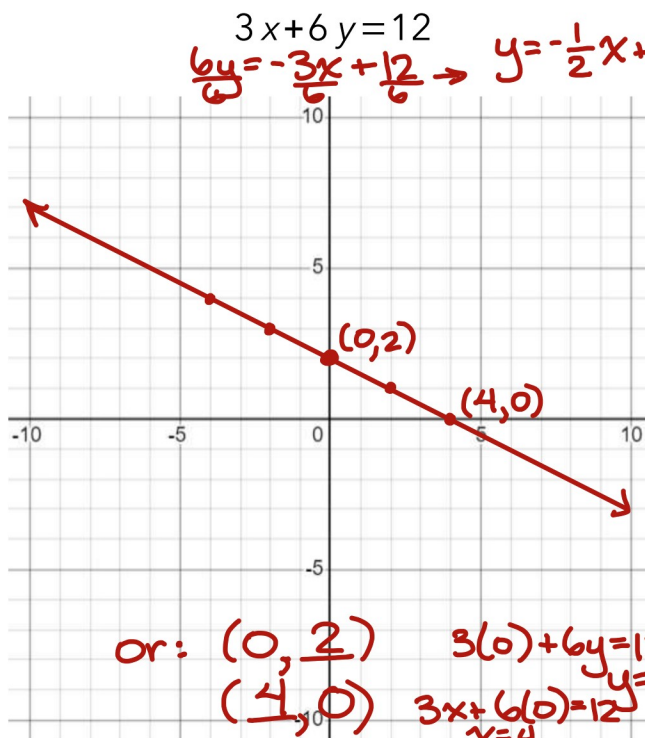
Write the three different forms of lines:

Slope-Intercept: $y = mx + b$

Point-Slope: $y - y_1 = m(x - x_1)$

Standard Form: $Ax + By = C$

Graph (using any method you choose):



Transform each equation into standard form:

$\frac{3}{5}y - 2x + 4 = 0$
 $5(-2x + \frac{3}{5}y = -4)$
 $-10x + 3y = -20$
 -or-
 $10x - 3y = 20$

$7 - \frac{2}{3}y = \frac{5}{2}x$
 $6(\frac{5}{2}x + \frac{2}{3}y = 7)$
 $15x + 4y = 42$

$-3y + \frac{1}{3}x = -2$
 $3(\frac{1}{3}x - 3y = -2)$
 $x - 9y = -6$

Answer the questions:

For $y = \frac{2}{5}x - 2$,

what is the slope? $\frac{2}{5}$

what is the y-intercept? -2 or $(0, -2)$

For $y - 3 = \frac{1}{2}(x + 7)$,

what is the slope? $\frac{1}{2}$

what is a point on the line? $(-7, 3)$

(Tricky!) For $y + 5 = x$,

$y = x - 5$

what is the slope? 1 or $\frac{1}{1}$

what is a point on the line? $(0, -5)$

y-intercept is easiest
but any point that fits in the
equation works!