**tercept**, look where **x = 0**.

| x | y |
|---|---|
| -8 | 0 |
| -4 | 6 |
| 0 | 12 |
| 4 | 18 |
| 8 | 24 |

x-int:_____

y-int:_____

12 0

| x | y |
|---|---|
| 10 | 1 |
| 8 | 2 |
| 6 | 3 |
| 4 | 4 |
| 2 | 5 |

0 6

x-int:_____

y-int:_____

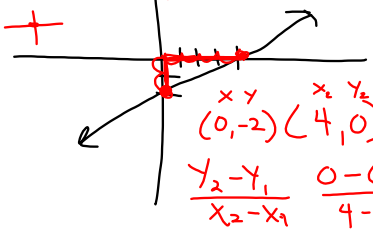
Dec 6-11:03 AM

x intercept = 4 $y = -2$

$(4,0)$ $(0,-2)$

$\frac{\text{Rise}}{\text{Run}} = \frac{2}{4}$

$8x - 16y = 32$



$x\ y$ $(0,-2)$ $x_2\ y_2$ $(4,0)$

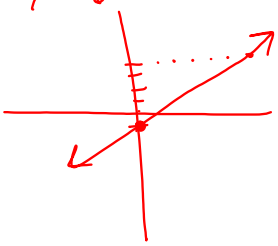
$\frac{y_2 - y_1}{x_2 - x_1}$ $\frac{0-(-2)}{4-0}$

$\frac{-2-0}{0-4}$

Dec 6-11:39 AM

$y = \frac{5}{6}x - 1$

$y = mx + b$ (move, begin)



Dec 6-11:47 AM

$\cancel{5x} - 2\boxed{y} = 8$

$-5x \qquad -5x$

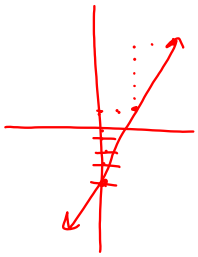
$\frac{-2y}{-2} = \frac{-5x}{-2} + \frac{8}{-2}$

$\boxed{y = \frac{5}{2}x - 4}$

$\boxed{5}x \boxed{-2}y = 8$

$(0,-4)$

slope $= \frac{-a}{b} = \frac{-5}{-2}$



Dec 6-11:48 AM

$6x + 5y = 10$ slope $= \frac{-a}{b}$

$\frac{5y}{5} = \frac{10}{5}$ $\boxed{m = \frac{-6}{5}}$

$\boxed{y = 2}$

$\frac{6x}{6} = \frac{10 \div 2}{6 \div 2}$ $\frac{5}{3} = 1\frac{2}{3}$ $y = -\frac{6}{5}x + 2$

$\boxed{x = 1.67}$

$6x + 5\boxed{y} = 10$

$-6x \qquad -6x$

$\frac{5y}{5} = \frac{-6x}{5} + \frac{10}{5}$

$y = -\frac{6}{5}x + 2$

Dec 6-11:56 AM

$(3,6)$ $(6,9)$ $\frac{y_2 - y_1}{x_2 - x_1}$

$x\ y$ $x\ y$

$\frac{9-6}{6-3} = \frac{3}{3} = 1$ $\frac{6-9}{3-6} = \frac{-3}{-3} = 1$

Dec 6-12:01 PM

$(2,7)(4,4)$
$x\ y \quad x\ y$

$\frac{\text{nominator}}{\text{denominator}}$ $\frac{y_2-y_1}{x_2-x_1}$ $\frac{4-7}{4-2}$ $\boxed{\frac{-3}{2}}$

Dec 6-12:07 PM

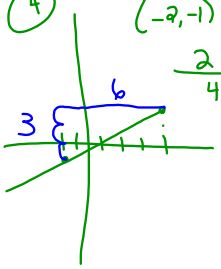
$(-1,-5)(-9,-1)$

$\frac{-1-(-5)}{-9-(-1)}$ $\frac{4}{-8} = -\frac{1}{2}$

Dec 6-12:09 PM

4) $(-2,-1)(4,2)$

$\frac{2-(-1)}{4-(-2)}$ $\frac{3}{6} = \frac{1}{2}$




Dec 6-12:10 PM

5) $\frac{45-25}{2-0} = \frac{20}{2} = 10$

$\frac{85-45}{6-2} = \frac{40}{4} = 10$

Dec 6-12:11 PM

| x | y |
|---|---|
| 0 | 25 |
| 2 | 45 |
| 4 | 65 |
| 6 | 85 |

Dec 6-12:14 PM

8) $8x + 2y = 96$ $\quad ax + by = c$

$m$ = Slope $= \frac{-8}{2} = -4$ $\quad \frac{-a}{b}$

$\frac{2y}{2} = \frac{-8x}{2} + \frac{96}{2}$

$y = -4x + 48$

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9 $5x = 90 - 9y$

$\boxed{5x + 9y = 90}$

$m = \frac{-a}{b} = \frac{-5}{9}$

$5x = 90 - 9y$

$-90 \quad -90$

$\frac{5x}{-9} - \frac{90}{-9} = \frac{-9y}{-9}$

$-\frac{5}{9}x + 10 = y$

$\boxed{y = -\frac{5}{9}x + 10}$

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10 $5y = 160 + 9x$

$5y = 160 + 9x$

$-9x + 5y = 160$

$\frac{a}{b} = \frac{9}{5} = m$

$\frac{5y}{5} = \frac{160}{5} + \frac{9x}{5}$

$y = 32 + \frac{9}{5}x$

$y = \boxed{\frac{9}{5}}x + 32$

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11 $(2,5)(3,1)$

$\frac{1-5}{3-2} = -4$

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$(-9,-5)(6,-5)$

$\frac{-5 - (-5)}{6 - -9} \quad \frac{0}{15} = 0$

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$(3,4)(3,-1)$

$\frac{-1-4}{3-3} = \frac{-5}{0}$ undefined

Dec 6-12:30 PM