

February 10, 2015
 * Exam # 1 - Friday
 February 20th!
 • Review Wednesday
 Prior

Feb 10-9:53 AM

(5, -6) & (-2, 8)

① ② $m = \frac{(8) - (-6)}{(-2) - (5)}$
 $= \frac{14}{-7} = -2$

$y = mx + b$

③ $-6 = -2(5) + b$ ④ $y = -2x + 4$ ✓
 $-6 = -10 + b$
 $4 = b$ $2x + y = 4$ ✓

⑤ Check (-2, 8)
 $8 = -2(-2) + 4$
 $= 4 + 4$
 $8 = 8$ ✓

Feb 10-10:05 AM

$y = -2x + 4$ Slope-Intercept Form

Rule
 $f(x) = -2x + 4 = \text{output}$
 ↑
 Input

① Finding Intercepts
 a) y-Intercept: (0, b)
 (0, y)
 b) x-Intercept: (x, 0)

① y-intercept: (0, 4)
 $f(0) = -2(0) + 4$
 $= 0 + 4$
 $= 4$

$y = f(x)$
 (0, 4) (2, 0)

② x-intercept: (2, 0)
 $0 = -2x + 4$ Solve for x
 $-4 = -2x$
 $\frac{-4}{-2} = \frac{-2x}{-2}$
 $2 = x$

Feb 10-10:10 AM

$2x + y = 4$

a) y-int.: (0, 4)
 $2(0) + y = 4$ solve for y
 $0 + y = 4$
 $y = 4$

b) x-int.: (2, 0)
 $2x + 0 = 4$
 $2x = 4$
 $x = 2$

Feb 10-10:23 AM

$f(x) = -2x + 4$

what is the Domain of "f"?

$+\infty$ $(-\infty, \infty)$

Feb 10-10:27 AM

$x = 4 \Rightarrow x + 0y = 4$

Domain?
 $[4]$

(4)?

Feb 10-10:31 AM

$9x - 7y = 11$

x	y	
?	0	x -int
0	?	y -int

Find x & y Intercepts and state the Domain.

x -int: $(\frac{11}{9}, 0)$

$$9x - 7(0) = 11$$

$$x = \frac{11}{9}$$

y -int: $(0, -\frac{11}{7})$

$$9(0) - 7y = 11$$

$$y = -\frac{11}{7}$$

Domain: $(-\infty, \infty)$

Feb 10-10:37 AM

$(\frac{11}{9}, 0) \neq (0, -\frac{11}{7})$

$$m = \frac{(-\frac{11}{7}) - (0)}{(0) - (\frac{11}{9})}$$

$$= \frac{-\frac{11}{7} \text{ K}}{-\frac{11}{9} \text{ F}} = \frac{-\frac{11}{7} \cdot \frac{9}{9}}{-\frac{11}{9} \cdot \frac{7}{7}} = \frac{-\frac{99}{7}}{-\frac{77}{9}} = \frac{99}{77} = \frac{9}{7}$$

Feb 10-10:46 AM

Do 3.3 COR

Feb 10-10:49 AM