BE-Algebra 1 | Wednesday 9-24-08

① Solve: $\frac{4}{5} = \frac{x}{20}$

② Solve: $\frac{x-5}{4} = \frac{3}{2}$

③ Solve for x: $\frac{ax+1}{2} = b$

④ Graph: $3x+y=4$

- Use "y Tq" method
- domain is {All ℝ}

All real Numbers

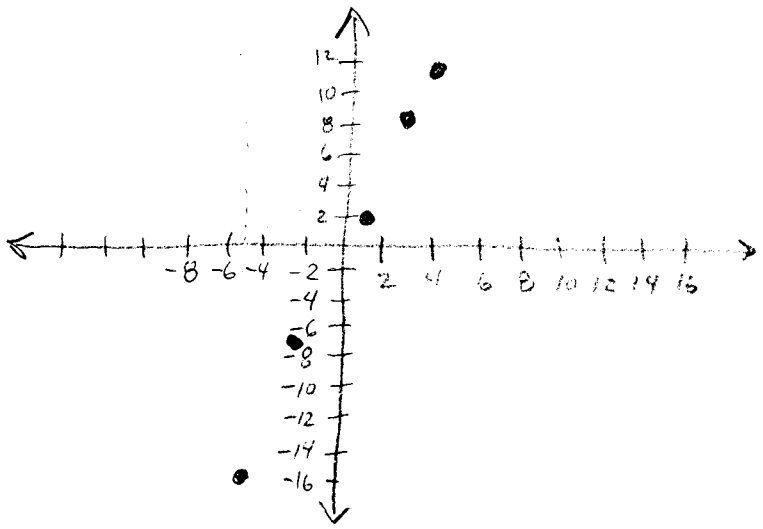
- Homework review: Pg. 215 # 33/34
  # 35/36 ⇒ {ℝ}

(see next page)

- Homework: Pg 215 # 14 to 17
  ASSUME domain is {All ℝ}

(33) $y = 3x - 1$ for $x = \{-5, -2, 1, 3, 4\}$

x	$y = 3x - 1$
-5	$3(-5) - 1 = -16$
-2	$3(-2) - 1 = -7$
1	$3(1) - 1 = 2$
3	$3(3) - 1 = 8$
4	$3(4) - 1 = 11$



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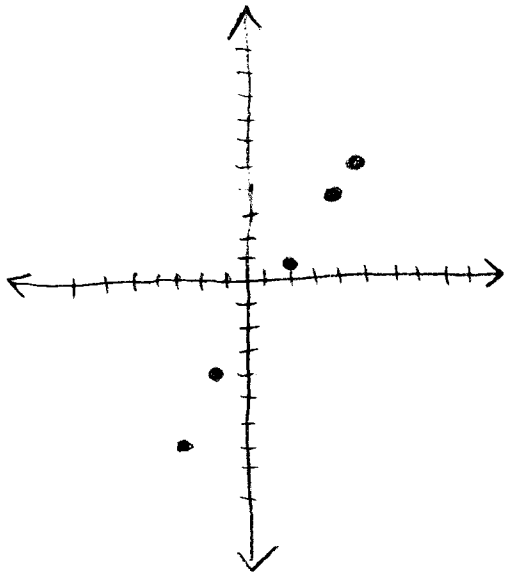
(34) $3x - 2y = 5$ for $x = \{-3, -1, 2, 4, 5\}$

$-3x \qquad -3x$

$$\frac{-2y}{-2} = \frac{-3x + 5}{-2}$$

$$y = \frac{3}{2}x - \frac{5}{2}$$

x	$y = \frac{3}{2}x + \frac{5}{2}$
-3	$\frac{3}{2}\left(\frac{-3}{1}\right) - \frac{5}{2} = \frac{-9}{2} - \frac{5}{2} = -7$
-1	$\frac{3}{2}(-1) - \frac{5}{2} = -\frac{3}{2} - \frac{5}{2} = -4$
2	$\frac{3}{2}\left(\frac{2}{1}\right) - \frac{5}{2} = \frac{6}{2} - \frac{5}{2} = \frac{1}{2}$
4	$\frac{3}{2}\left(\frac{4}{1}\right) - \frac{5}{2} = \frac{12}{2} - \frac{5}{2} = \frac{7}{2} = 3\frac{1}{2}$
5	$\frac{3}{2}\left(\frac{5}{1}\right) - \frac{5}{2} = \frac{15}{2} - \frac{5}{2} = 5$



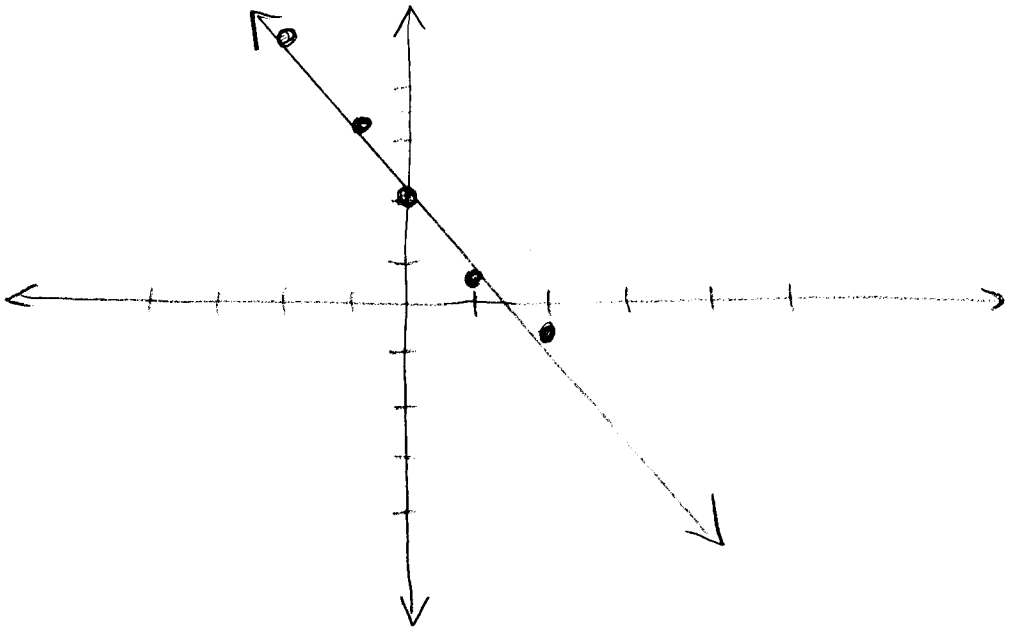
(35) $5x + 4y = 8$ for $x = \{\text{ALL } \mathbb{R}\}$

$-5x \qquad -5x$

$$\frac{4y}{4} = \frac{-5x + 8}{4}$$

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

x	$y = -\frac{5}{4}x + 2$
-2	$-\frac{5}{4}\left(\frac{-2}{1}\right) + 2 = \frac{10}{4} + 2 = \frac{5}{2} + \frac{4}{2} = \frac{9}{2} = 4\frac{1}{2}$
-1	$-\frac{5}{4}(-1) + 2 = \frac{5}{4} + \frac{8}{4} = \frac{13}{4} = 3\frac{1}{4}$
0	$-\frac{5}{4}(0) + 2 = 2$
1	$-\frac{5}{4}(1) + 2 = -\frac{5}{4} + \frac{8}{4} = \frac{3}{4}$
2	$-\frac{5}{4}(2) + 2 = -\frac{10}{4} + \frac{8}{4} = -\frac{2}{4} = -\frac{1}{2}$



(36) $\frac{1}{2}x + y = 2$ for $x = \{\text{All } \mathbb{R}\}$

$-\frac{1}{2}x \qquad -\frac{1}{2}x$

$$y = -\frac{1}{2}x + 2$$

x	$y = -\frac{1}{2}x + 2$
-2	$-\frac{1}{2}\left(\frac{-2}{1}\right) + 2 = 1 + 2 = 3$
-1	$-\frac{1}{2}(-1) + 2 = \frac{1}{2} + 2 = 2\frac{1}{2}$
0	$-\frac{1}{2}(0) + 2 = 2$
1	$-\frac{1}{2}(1) + 2 = -\frac{1}{2} + 2 = 1\frac{1}{2}$
2	$-\frac{1}{2}(2) + 2 = -1 + 2 = 1$