

5.1.1

HWK

5-5) 5 tiles in Fig. 0 and adds 7 tiles in each new figure

$$y = 7x + 5$$

5-6) a) solve for x:  $2x + 22 = 12$

$$\underline{-22 \quad -22}$$

$$\frac{2x}{2} = \frac{-10}{2}$$

$$x = -5$$

b) solve for y:  $2x - y = 3$

$$\underline{-2x \quad -2x}$$

$$(-1) - y = (-1)3 - 2x$$

$$y = -3 + 2x$$

$$y = 2x - 3$$

c) solve for x:  $2x + 15 = 2x - 15$

$$\underline{-15 \quad -15}$$

$$\frac{2x}{2} = \frac{2x - 30}{2}$$

$$x = x - 15$$

no solution!

d) solve for y:  $6x + 2y = 10$

$$\underline{-6x \quad -6x}$$

$$\frac{2y}{2} = \frac{10 - 6x}{2}$$

$$y = 5 - 3x$$

$$y = -3x + 5$$

5-7) solve for  $x$ . Then check each solution.

a)  $\frac{x}{16} = \frac{7}{10}$

$$\frac{10x}{10} = \frac{112}{10}$$

$$x = 11.2$$

$$\frac{11.2}{16} = \frac{7}{10}$$

$$0.7 = 0.7$$

b)  $\frac{6}{15} = \frac{3}{x}$

$$\frac{6x}{6} = \frac{45}{6}$$

$$x = 7.5$$

$$\frac{6}{15} = \frac{3}{7.5}$$

$$0.4 = 0.4$$

c)  $\frac{2x}{5} = \frac{12}{8}$

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

$$\frac{5}{2} \cdot \frac{2}{5}x = \frac{3}{2} \cdot \frac{5}{2}$$

$$x = \frac{15}{4}$$

$$x = 3.75$$

$$\frac{2(3.75)}{5} = \frac{12}{8}$$

$$\frac{1.5}{5} = \frac{1.5}{8}$$

$$1.5 = 1.5$$

d)  $-8 = \frac{2}{x}$

$$x(-8) = \frac{2}{x}(x)$$

$$\frac{-8x}{-8} = \frac{2}{-8}$$

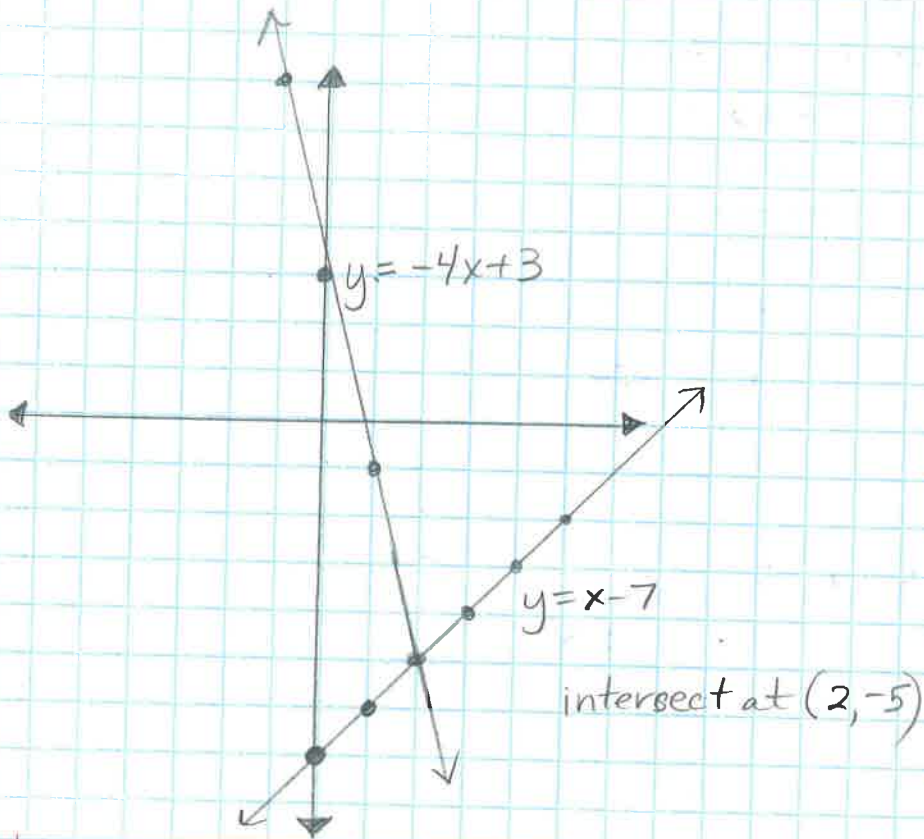
$$x = -\frac{1}{4} \text{ or } -0.25$$

$$-8 = \frac{2}{-0.25}$$

$$-8 = -8$$

next page

5-8)  $y = -4x + 3$  and  $y = x - 7$



5-9)  $y = -3x + 10$

Fig. 0

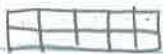


fig. 1



fig. 2



fig. 3

