HW 62

1.a) $0.2 = 47 + 3(-15.6)$

$0.2 = 0.2$ ✓

Yes!

$0.2 = 8 + 0.5(-15.6)$

$0.2 = 0.2$ ✓

b) $23 = 15 - 2(4)$

$23 = 23$ ✓

$23 = 12 - 4$

$23 = 8$ ✗

No, the point does not make both eq. true

c) $12.3 = 4.5 + 5(2)$

$12.3 = 14.5$ ✗

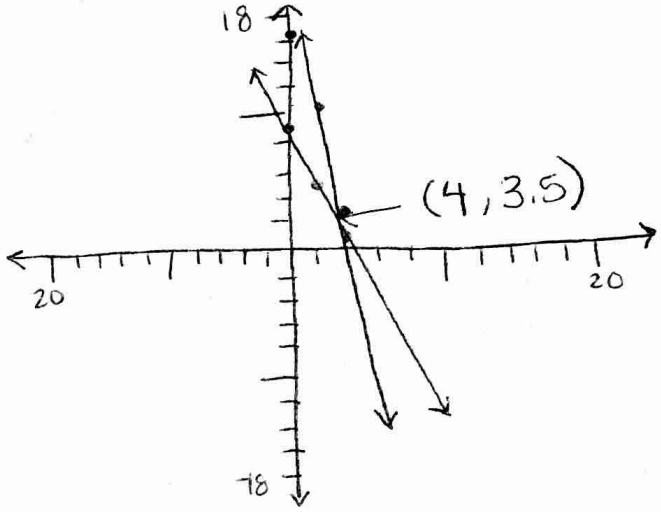
$12.3 = 2.3 + 5(2)$

$12.3 = 12.3$ ✓

No, the point does not make both eq. true

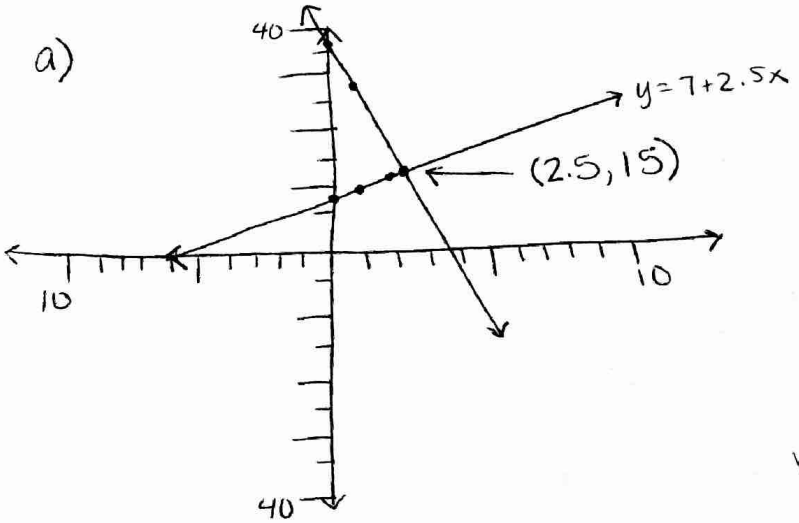
b) $y = -2x + 9$

$y = -3x + 16.3$



4. (Your graphs ~~sorta~~ should be better, I did not have graph paper)

a)



5. a) $\frac{2y}{2} = \frac{-4x + 6}{2}$

$y = -2x + 3$

$y = -2(1) + 3$

$y = -2 + 3$

$y = 1$

$4(1) + 2(1) = 6$

$6 = 6$ ✓

b) $\frac{-5y}{-5} = \frac{-2x + 20}{-5}$

$y = 2/5\,x - 4$

$y = 2/5(1) - 4$

$y = -18/5$

$2(1) - 5(-18/5) = 20$

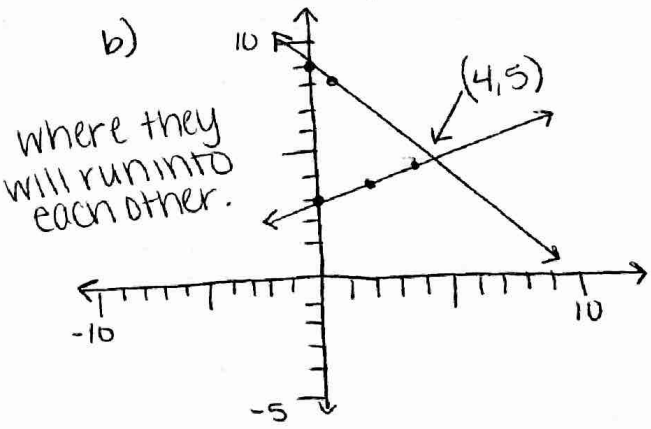
$2 + 18 = 20$

$20 = 20$

The point is on the line & you can check your work.

9. a) $y = 9 - 1x$ & $y = 3 + 0.5x$

b)



where they will run into each other.

13. a) $\frac{0.75x}{.75} = \frac{63.75}{.75}$

$\boxed{x = 85}$

$0.75(85) = 63.75$

$63.75 = 63.75$ ✓

b) $\frac{18.86}{-2.3} = \frac{-2.3x}{-2.3}$

$\boxed{-8.2 = x}$

$18.86 = -2.3(-8.2)$

$18.86 = 18.86$ ✓

c) $6 = 12 - 2x$

$-12 \quad -12$

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

$\boxed{3 = x}$

$6 = 12 - 2(3)$

$6 = 6$ ✓

d) $9 = 6(x-2)$

$9 = 6x - 12$

$+12 \quad +12$

$\frac{21}{6} = \frac{6x}{6}$

$21/6 = x$

$\boxed{7/2 = x}$

$9 = 6(7/2 - 2)$

$9 = 6(3/2)$

$9 = 9$ ✓

e) $4(x+5) - 8 = 18$

$+8 \quad +8$

$4(x+5) = 26$

$4x + 20 = 26$

$-20 \quad -20$

$\frac{4x}{4} = \frac{6}{4}$

$x = 6/4 = \boxed{3/2 = x}$

$4(3/2 + 5) - 8 = 18$

$4(13/2) - 8 = 18$

$18 = 18$ ✓

16 a) $y = 5x - 2$

b) $y = \frac{4}{5} - \frac{7}{5}x$

c) $\frac{2y}{2} = \frac{4x+3}{2}$

$y = 2x + 3/2$