Solve the following linear equations: Follow SAMDEB

a) $\frac{w}{4} + 31 = 7$ -31

$\frac{w}{4} = 7 - 31$

$\frac{w}{4} = -24 \times 4$

$w = -96$

b) $\frac{(2x - 5)}{3} = -7 \times 3$

$2x - 5 = -21$ $+5$

$\frac{2x}{2} = \frac{-16}{2}$

$x = -8$

c) $2(4x + 13) = 3(4 - 9x)$

$8x + 26 = 12 - 27x$ -26

$8x = 12 - 27x - 26$

$8x + 27x = 12 - 26$

$\frac{35x}{35} = \frac{-14}{35} \div 7$ $\div 7$

$x = \frac{-2}{5} = -0.4$

d) $\frac{a}{4} - \frac{a+3}{5} = 1$

$20\left(\frac{a}{4}\right) - 20\left(\frac{a+3}{5}\right) =$

$20(1)$

$5(a) - 4(a+3) = 20$

$5a - 4a - 12 = 20$ $+12$

$1a = 32$

Solve the following equation for y in terms of x.

$6x - 5y - 24 = 0$ $+24$

$6x - 5y = 24$ $-6x$

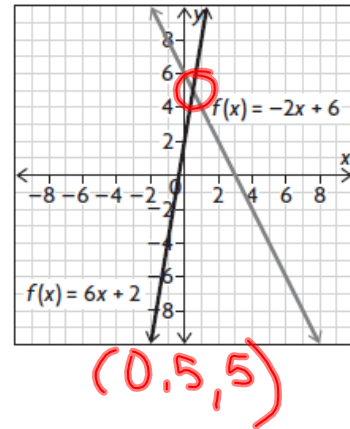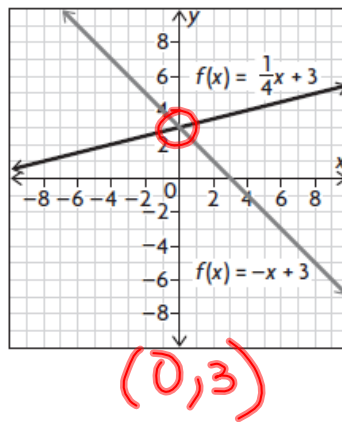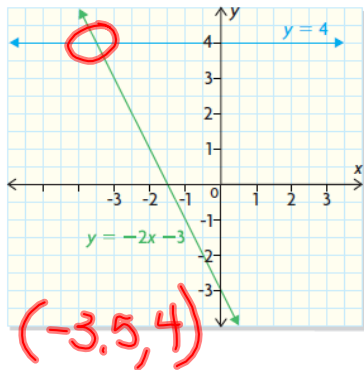$\frac{-5y}{-5} = \frac{24 - 6x}{-5}$

$y = \frac{24 - 6x}{-5}$

$y = \frac{24}{-5} - \frac{6x}{-5}$

$y = \frac{24}{-5} + \frac{6x}{5}$

(SAMDEB)

State the point of intersection (name the coordinates) for each of the following graphs.

Graph 1: Lines $y = 4$ and $y = -2x - 3$, intersection circled. Answer: $(-3.5, 4)$

Graph 2: Lines $f(x) = \frac{1}{4}x + 3$ and $f(x) = -x + 3$, intersection circled. Answer: $(0, 3)$

Graph 3: Lines $f(x) = -2x + 6$ and $f(x) = 6x + 2$, intersection circled. Answer: $(0.5, 5)$

Chapter 4 Review

Section 4.1 - p. 203 #15

Section 4.2 - p. 211 #12ac

Section 4.3 - p. 221 #5d, 7d, 8, 9, 12def

Section 4.4 - p. 237 #7d, 9

Section 4.5 - p. 251 #15ab

p.203 #15a) $V = 100 - 5m$

b) $V = 100 - 5(13)$

$ = 100 - 65$

$ = 35 L$

p.221
#8

$$n - 5 = 3n + 1$$

$+5$

$-3n$

$n - 3n = 1 + 5$

$\dfrac{-2n}{-2} = \dfrac{6}{-2}$

$n = -3$

p221
#9

$P = 2(l + w)$

$36 = 2(l + w)$, $w = l - 5$

$36 = 2(l + (l - 5))$

$36 = 2(2l - 5)$

$36^{+10} = 4l - 10^{+10}$

$\dfrac{46}{4} = \dfrac{4l}{4}$, $l = 11.5$

$w = 11.5 - 5$
$ = 6.5$