

Module 4 Review Solutions

1. a.) $y = 20x + 55$

b.) $210 = 20x + 55$
 $155 = 20x$
 $\frac{155}{20} = x = 7.75$

Nancy would need to work 7.75 hours on the second day to plant 210 marigolds.

2. $3(2x+8) + 6 = 5x - 4(x-2)$

$6x + 24 + 6 = 5x - 4x + 8$

$6x + 30 = x + 8$

$5x + 30 = 8$

$5x = -22$

$x = \frac{-22}{5} = -4.4$

3. $\frac{1}{2}x + 5 = \frac{5}{4}x - 7$

$-\frac{2}{4}x \quad -\frac{2}{4}x$

$5 = \frac{3}{4}x - 7$

$12 = \frac{3}{4}x$

$12(\frac{4}{3}) = x$

$16 = x$

4. $5x - 3(x+2) = 2x + 8$

$5x - 3x - 6 = 2x + 8$

$2x - 6 = 2x + 8$

$-6 = 8$
 NO SOLUTION

5. $A = \frac{1}{2}bh$

$15 = \frac{1}{2}(5)h$

$15 = (\frac{5}{2})h$

$15(\frac{2}{5}) = h$

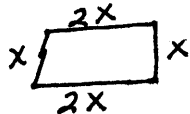
$6in = h$

6. $P = 2L + 2W$

$P - 2W = 2L$

$\frac{P - 2W}{2} = L$

7. width = x
 length = $2x$



$6x = 92$
 $x = \frac{92}{6} = 15\frac{1}{3}$

width = $15\frac{1}{3}$ ft.
 length = $30\frac{2}{3}$ ft.

8. $\frac{3}{4}(3x-2) < \frac{1}{2}x + \frac{9}{8}$

$\frac{9}{4}x - \frac{3}{2} < \frac{1}{2}x + \frac{9}{8}$

$\frac{9}{4}x < \frac{1}{2}x + \frac{21}{8}$

$\frac{7}{4}x < \frac{21}{8}$

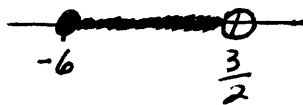
$x < \frac{21}{8} \cdot \frac{4}{7}$

$x < \frac{3}{2}$

9. $-8 \leq 2x + 4 < 7$

$-12 \leq 2x < 3$

$-6 \leq x < \frac{3}{2}$



10. $|2x-3| = 7$

$2x-3 = 7$

$2x = 10$

$x = 5$

$2x-3 = -7$

$2x = -4$

$x = -2$

