

HW

10/18

53

#5, 6, 10, 12, 13, & 18

$$\begin{array}{r} \text{(T) 5.) } 11d = 81 - 16d \\ +16d \quad \quad +16d \\ \hline 27d = 81 \\ 27 \quad \quad 27 \end{array}$$

$$d = 3$$

$$\begin{array}{r} \text{(I) 6.) } -22 - 1x = 5 + 6x + 9 \leftarrow \text{Combine like terms} \\ -22 - 1x = 14 + 6x \\ \quad \quad -6x \quad \quad -6x \\ \hline -22 - 7x = 14 \\ +22 \quad \quad +22 \\ \hline -7x = 36 \\ \quad \quad -7 \quad \quad -7 \end{array}$$

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

$$\begin{array}{r} \text{(W) 10.) } 9(m-2) = 1m + 40 \quad * \text{ put a 1 in front} \\ 9m - 18 = 1m + 40 \quad \text{of "m"} \\ -1m \quad \quad -1m \\ \hline 8m - 18 = 40 \\ +18 \quad +18 \\ \hline 8m = 58 \\ 8 \quad \quad 8 \end{array}$$

$$m = 7 \frac{2}{8} \text{ or } 7 \frac{1}{4}$$

$$(Y) 12) \quad 5x + 2(11 - 4x) = 82 + x$$

$$5x + 22 - 8x = 82 + 1x$$

$$-3x + 22 = 82 + 1x$$

$$\begin{array}{r} -1x \\ \hline -4x + 22 = 82 \end{array}$$

$$-4x + 22 = 82$$

$$\begin{array}{r} -22 \\ \hline -4x = 60 \end{array}$$

$$-4x = 60$$

$$\begin{array}{r} -4 \\ \hline x = 15 \end{array}$$

$$x = 15$$

$$\begin{array}{r} 15 \\ 4 \overline{)60} \\ \underline{-4} \\ 20 \end{array}$$

$$\bullet 13) \quad 16 - 5(3t - 4) = 8(-2t + 11)$$

$$16 - 15t + 20 = -16t + 88$$

$$36 - 15t = -16t + 88$$

$$\begin{array}{r} +16t \\ \hline 36 + t = 88 \end{array}$$

$$36 + t = 88$$

$$\begin{array}{r} -36 \\ \hline t = 52 \end{array}$$

$$t = 52$$

(m) 18) Let $x = \text{Simon's age}$

$$5x - 4 = 3x + 2$$

$$\begin{array}{r} -3x \\ \hline 2x - 4 = 2 \end{array}$$

$$2x - 4 = 2$$

$$\begin{array}{r} +4 \\ \hline 2x = 6 \end{array}$$

$$2x = 6$$

$$\begin{array}{r} 2 \\ \hline x = 3 \end{array}$$

$$x = 3 \text{ yrs}$$

Simon is 3 yrs