

1. The perimeter of a rectangle is 52 ft, and its width is 10 ft. Find the length.

$$P = 2L + 2W$$

$$\begin{array}{ccc} \uparrow & & \uparrow \\ 52 & & 10 \end{array}$$

$$52 = 2(L) + 2(10)$$

$$52 = 2L + 20$$

$$\begin{array}{ccc} -20 & & -20 \end{array}$$

$$32 = 2L \rightarrow L = \frac{32}{2} = 16 \text{ ft.}$$

2. Translate and solve: 8 less than the product of 3 and a number results in 50. Find the number.

Translate:  $3n - 8 = 50$

$$\begin{array}{ccc} & -8 & = 50 \\ & +8 & +8 \end{array}$$

Solve:  $3n = 58$

$$\frac{3n}{3} = \frac{58}{3}$$

$$n = \frac{58}{3} = 19\frac{1}{3}$$

$$\begin{array}{r} 19 \\ 3 \overline{)58} \\ \underline{-3} \\ 28 \\ \underline{27} \\ 1 \end{array}$$