



$$\frac{\cancel{5}t}{\cancel{5}} = -\frac{15}{5}$$

given

$$t = -3$$

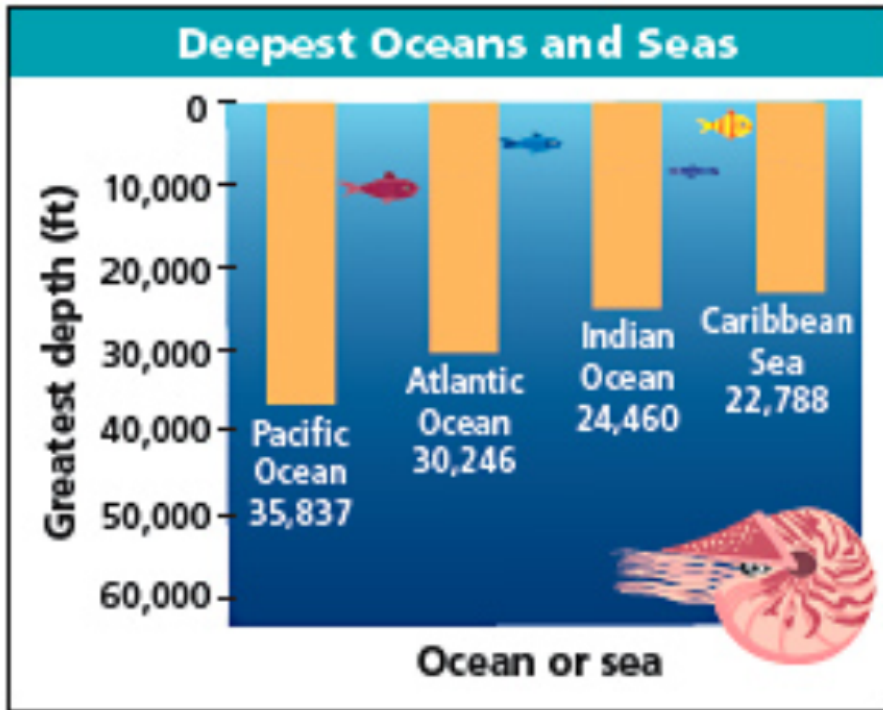
div. prop.  
of eq.

$$\begin{array}{r} -4 + 9 = -9 \\ +4 \quad \quad \quad +4 \end{array}$$

given

$$9 = -5$$

add. prop.  
of. eq.

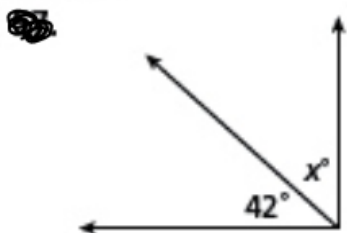


The Pacific Ocean's average depth is 19,588 feet less than the greatest depth.

Let  $X$  be the average depth

$$x = \begin{array}{r} 2712 \\ 35,837 \\ -19,588 \\ \hline 16,249 \end{array}$$

**Geometry** The angles in each pair are complementary. Write and solve an equation to find each value of  $x$ . (*Hint: The measures of complementary angles add to  $90^\circ$ .*)



$$\begin{array}{r} \textcircled{x} + 42 = 90 \quad \text{given} \\ - \cancel{42} \quad | \quad - \underline{42} \end{array}$$

$$x = 48^\circ \quad \begin{array}{l} \text{Subst.} \\ \text{prop.} \\ \text{of} \\ \text{eq.} \end{array}$$

20. **Geology** In 1668, the Hope diamond was reduced from its original weight by about 45 carats, resulting in a diamond weighing about 67 carats. Write and solve an equation to find how many carats the original diamond weighed.

Let  $x$  be the diamond's original weight

$$\textcircled{x} - 45 = 67 \quad \text{given}$$

$$+ 45 \quad \quad + 45$$

$$x = 112$$