

Key

HOMWORK: 4-2 Find the Missing Number(s)

Remember to...

1 DECLARE VARIABLES

Use "LET STATEMENTS" to define your variable.

2 SET UP EQUATION & SOLVE

Translate into an equation using your let statements. Then solve

3 DEFINE ANSWER

Show exactly what the problem is asking for.

1. Thirteen increased by 9 times a number is equal to four. Find the number.

Let $n = \text{number}$

$$\begin{array}{r} 13 + 9n = 4 \\ -13 \quad -13 \\ \hline 9n = -9 \\ \frac{9n}{9} = \frac{-9}{9} \\ \boxed{n = -1} \end{array}$$

The number is -1.

2. Six more than a number increased by that number is 50. Find the number.

$$6 + n + n = 50$$

Let $n = \#$

$$\begin{array}{r} 6 + 2n = 50 \\ -6 \quad -6 \\ \hline 2n = 44 \\ \frac{2n}{2} = \frac{44}{2} \\ \boxed{n = 22} \end{array}$$

The number is 22

3. The larger of two numbers is four more than the smaller number. If the sum of the numbers is 74, find the numbers.

Larger	$4 + x$	39
Smaller	x	35

$$x + 4 + x = 74$$

$$\begin{array}{r} 2x + 4 = 74 \\ -4 \quad -4 \\ \hline 2x = 70 \end{array}$$

$$\frac{2x}{2} = \frac{70}{2}$$

$$\boxed{x = 35}$$

4. The larger of two numbers is seven less than three times the smaller number. If the sum of these numbers is 61, find the numbers.

Larger	$3x - 7$	44
Smaller	x	17

$$x + 3x - 7 = 61$$

$$\begin{array}{r} 4x - 7 = 61 \\ +7 \quad +7 \\ \hline 4x = 68 \end{array}$$

$$\frac{4x}{4} = \frac{68}{4}$$

$$\boxed{x = 17}$$