Word Problems – 2 Variables

To solve using more than one variable, you will need to find the same number of equations as variables – a system of equations.

The sum of two consecutive <u>even</u> numbers is 62. Find the numbers.

In one variable

$$#2-x+2$$

$$x + (x + 2) = 62$$

$$2x + 2 = 62$$

$$2x = 60$$

x = 30; two numbers are 30 and 32

In two variables

$$#1 - x$$

$$#2 - y$$

$$x + y = 62 \rightarrow y + x = 62$$

$$y-x=2 \qquad \underline{y-x=2}$$

$$y = 32$$
 $\therefore \rightarrow x = 30$