## 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 even numbers is 62 . Find the numbers.

In one variable
\#1- x
\#2- x + 2

$$
\begin{aligned}
x+(x+2) & =62 \\
2 x+2 & =62 \\
2 x & =60 \\
x & =30 ; \text { two numbers are } 30 \text { and } 32
\end{aligned}
$$

In two variables
\#1-x
\#2-y

$$
\begin{aligned}
x+y=62 \\
y-x=2
\end{aligned} \rightarrow \begin{aligned}
y+x & =62 \\
y-x & =2 \\
2 y \quad & =64 \\
y & =32 \quad \therefore \rightarrow x=30
\end{aligned}
$$

