Samples **Solve the problem SOLUTIONS**

1. Since the two integers are consecutive, we know that there is a difference of one between them. Let the smaller integer be represented by n, so the larger integer will then be $(n+1)$. We then have:

$$\begin{array}{rrcl} & n+(n+1) & = & 15 \\ \Longrightarrow & 2\times n+1 & = & 15 \\ \Longrightarrow & 2\times n & = & 14 \\ \Longrightarrow & n & = & 7 \end{array}$$

Note that this gives us the value of the *lower* integer only! We need *both* integers!

So if the smaller number is 7, then the larger number must be 8.

2. Since the two integers are consecutive, we know that there is a difference of one between them. Let the smaller integer be represented by n, so the larger integer will then be $(n+1)$. We then have:

$$\begin{array}{rrcl} & n+(n+1) & = & 17 \\ \Longrightarrow & 2\times n+1 & = & 17 \\ \Longrightarrow & 2\times n & = & 16 \\ \Longrightarrow & n & = & 8 \end{array}$$

Note that this gives us the value of the *lower* integer only! We need *both* integers!

So if the smaller number is 8, then the larger number must be 9.

3. Since the two integers are consecutive, we know that there is a difference of one between them. Let the smaller integer be represented by n, so the larger integer will then be $(n+1)$. We then have:

$$\begin{array}{rrcl} & n+(n+1) & = & 21 \\ \Longrightarrow & 2\times n+1 & = & 21 \\ \Longrightarrow & 2\times n & = & 20 \\ \Longrightarrow & n & = & 10 \end{array}$$

Note that this gives us the value of the *lower* integer only! We need *both* integers!

So if the smaller number is 10, then the larger number must be 11.