## January 2020 challenge

## RELATIONAL Challenge

In the following puzzle, there is a common arithmetic relationship between the set of equations that allow their respective solutions as shown. Determine the relationship to find the unknown relational value (?).

$$
\begin{aligned}
& 1+4=5 \\
& 2+5=11 \\
& 3+6=19 \\
& 5+8=?
\end{aligned}
$$

## MIND-Xpander (Circular Logic Challenge - Level 1)

You have 50 sticks standing upright in a circle (\#1 to \#50). Starting with stick \#1, knock over the next stick (\#2) in the circle. Then continue by knocking over every second stick (next is \#4). Keep going around and around the circle until one stick remains standing. What number is the last stick standing?

What if you start with stick \#4 and continue in same manner as above?

