



## Age 11+ Level ★ Worksheet 2

### 1. Down and Along

The letters  $J$ ,  $M$  and  $C$  represent three different non-zero digits.

What are the values of  $J$ ,  $M$  and  $C$ ?

$$\begin{array}{r} J J \\ M M \\ + C C \\ \hline J M C \end{array}$$

### 2. 354972

What is the remainder when 354972 is divided by 7?

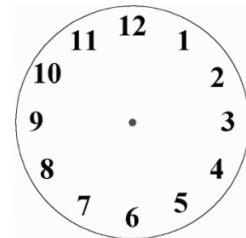
### 3. Subtracting to 2008

In this subtraction,  $P$ ,  $Q$ ,  $R$  and  $S$  are digits. What is the value of  $P + Q + R + S$ ?

$$\begin{array}{r} 8 Q 0 S \\ - P 0 R 2 \\ \hline 2 0 0 8 \end{array}$$

### 4. Split Clock face

Use 2 straight lines to split the clock face into 3 parts, so that the sums of the numbers in each of the parts are equal.



### 5. 50, 50, 50 and 50

Aroon says his age is 50 years, 50 months, 50 weeks and 50 days. What age will he be on his next birthday?

### 6. Missing Digits

In this calculation,  $K$ ,  $L$ ,  $M$ ,  $N$  and  $P$  each denote a single digit.

Find  $K$ ,  $L$ ,  $M$ ,  $N$  and  $P$ .

$$\begin{array}{r} K L M N P 4 \\ \times \phantom{4} \\ \hline 4 K L M N P \end{array}$$

*These problems are adapted from UKMT ([ukmt.org.uk](http://ukmt.org.uk)) and WMC ([competition.ac](http://competition.ac)) problems.*