

**Age 11+ Level ★  
Worksheet 1****1. No Matter**

Think of a whole number, double it, then add 3.  
Multiply your answer by 4 and then take away 5.  
Now take away the number you first thought of.  
Your answer will always be a multiple of which number?

**2. Nine in a Line**

The sum of 9 consecutive positive whole numbers is 2007.  
What is the largest of these numbers?

**3. Adding and Multiplying**

Amy was asked to multiply a number by 8 and then add 5. Instead, she added 8 to the number and then multiplied the result by 5. This gave her 2015.

What would the answer have been if Amy had followed the instructions correctly?

**4. Cube Pile**

Rick has five cubes. Each one is 2cm taller than the previous one. The largest cube is the same height as a tower built of the two smallest cubes.

How high would a tower of all five cubes be?

**5. 8 in a Row**

The sum of five consecutive integers is equal to the sum of the next three consecutive integers.

What is the largest of these eight integers?

**6. Paul's Children**

Paul is 32 years old. In ten years' time, Paul's age will be the sum of the ages of his three sons.

What do his sons' ages add up to now?

*These problems are adapted from UKMT ([ukmt.org.uk](http://ukmt.org.uk)) and SEAMC ([seamc.asia](http://seamc.asia)) problems.*