

## Investigation Fraction clues

1. Use your knowledge about finding fractions of numbers to solve this logic puzzle:

I am a whole number between 10 and 25.  
If you halve me, your answer will not be a whole number.  
If you find  $\frac{1}{3}$  of me, your answer will be a multiple of 5.  
If you try to find  $\frac{1}{4}$  of me, you may get a headache!  
If you find  $\frac{1}{5}$  of me, your answer will be a whole number.  
What am I?

2. Have a go at this one!

I am a very special number between 10 and 20.  
I am special because if you find  $\frac{1}{2}$  of me,  $\frac{1}{3}$  of me,  $\frac{1}{4}$  of me, or even  $\frac{1}{6}$  of me, you will get a whole number answer!  
What am I?

### Challenge

What if the number in puzzle two was between 20 and 30? Or between 30 and 40? Can you think of any other numbers that would satisfy all the other clues? What do you notice about them?

Think of another 'special' number and write your own fraction clues about it for someone else to work out.