



# Problem of the Week

## Problem C

### A Few More Marbles

Mark has a bag that contains exactly 3 black marbles, 6 gold marbles, 2 purple marbles and 6 red marbles.

Mark finds a number of white marbles and adds them to the bag. He tells Sam that if she now draws a marble at random from the bag, the probability of it being black or gold is  $\frac{3}{7}$ .

How many white marbles did Mark add to the bag?

