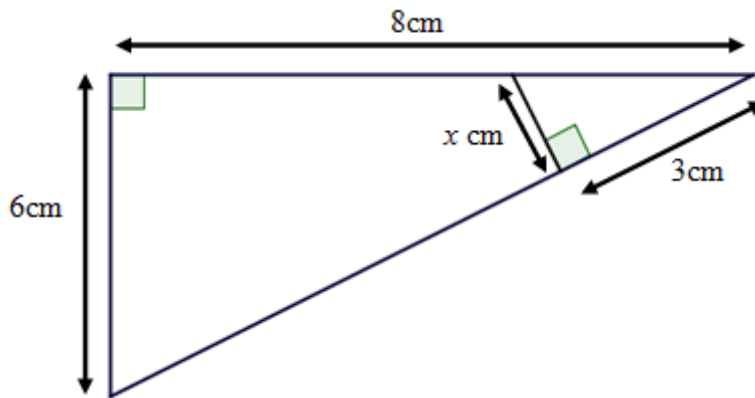# Edexcel AS Mathematics Problem solving

Section 1: Solving problems

Exercise level 3 (Extension)

1. A bag contains 140 balls of various colours. If 30 red balls are added to the bag the proportion of red balls in the bag is doubled. How many red balls were in the bag to begin with?

2. In how many ways can 45 be written as the sum of consecutive positive integers?

3. Find the value of x in the diagram below.

4. How many positive integers leave a remainder of 11 when divided into 1000?