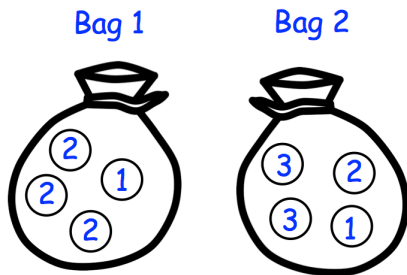


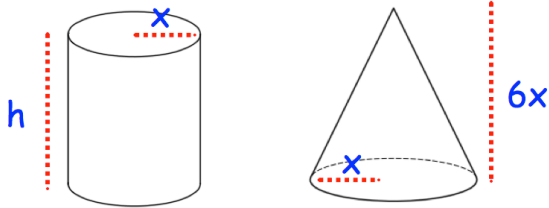


Bag 1 contains three discs labelled two and one disc labelled one.  
 Bag 2 contains two discs labelled three, one disc labelled one and one disc labelled two.



Kevin chooses a disc at random from bag 1.  
 If the disc is labelled 1, he puts the disc in bag 2.  
 If the disc is labelled 2, he does **not** put the disc in bag 2.  
 Kevin then chooses a disc at random from bag 2.  
 Kevin adds together the numbers from the two discs he selected to give his score.

Find the probability of Kevin scoring 3.



The volume of the cylinder and cone are equal.

Find  $h$  in terms of  $x$ .

Express  $8^{4x+5}$  in the form  $4^y$ , stating  $y$  in terms of  $x$ .

A farmer has a triangular field which has a perimeter of 300m.

The two smaller sides of the field are 80m and 90m long.

Calculate the area of the field.