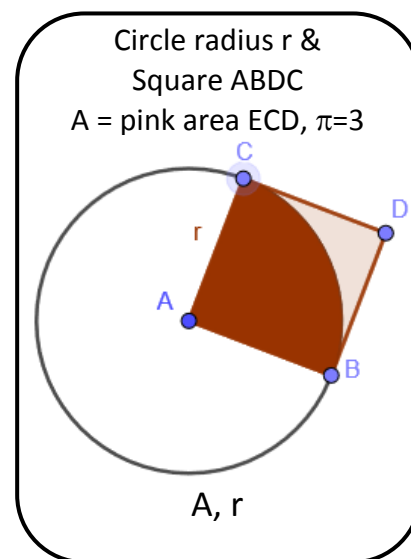
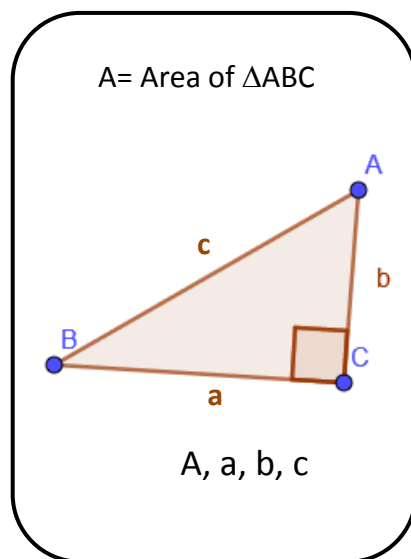
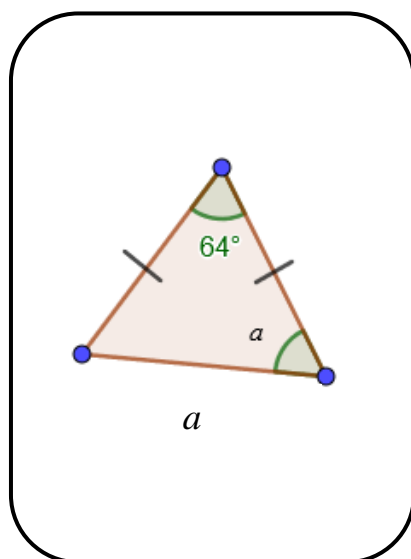


# Weekly Challenge #3: Answers

Welcome to the Count on Us Secondary Challenge's second weekly challenge. This week we have GridLines Geometry Challenges. If you do not know the game or the rules, you can download the rules on the Mayor's Fund for London website next to this challenge.

In each case we have shown one solution, there may be others.



The marks show this is an isosceles triangle, so angle  $a$  is half of  $180 - 64$  which is 58.

5 8

This is a right angled triangle so  $a$ ,  $b$  and  $c$  must be a Pythagorean triple. Then the area  $A$  is  $\frac{1}{2} \times a \times b$   
 E.g. 30,40,50 and  $A=600$

30 40 50 600

The pink area is what is left when a quarter circle is removed from the square.  
 So,  $A = r^2 - \frac{1}{4} \times 3 \times r^2 = \frac{1}{4} r^2$   
 E.g.  $r = 20$  and  $A = 100$

20 100

HELP US SPREAD THE WORD...

We want to make sure everyone in London knows about your fantastic maths problem solving. Share your thinking, your solutions and photos on Twitter!  
 Keep them coming and remember - tag us and your school in any online activity.

#CountOnUs @mayorsfund @JPFoundation