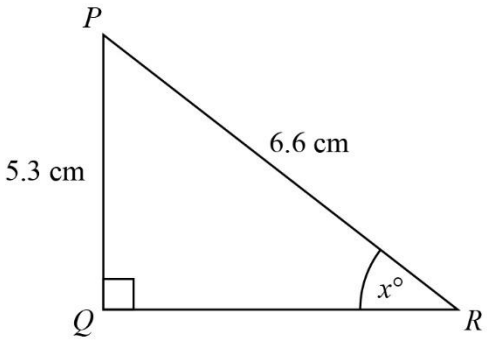
**NAME**

**Time:**

**Calculator Questions**

**1** The diagram shows a triangle *PQR*.

The lengths of the sides are given correct to 1 decimal place.




**a** Work out the upper bound for the value of *x*.

**(2 marks)**

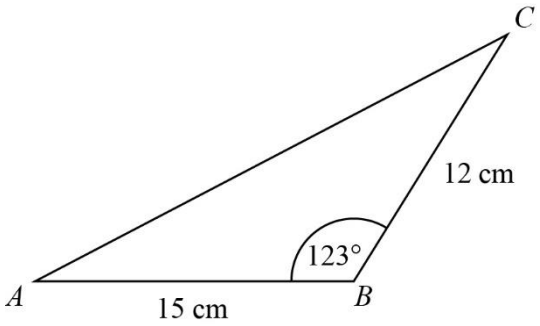
**b** Work out the lower bound for the value of *x*.

**(2 marks)**

**c** Write the value of *x* to a suitable degree of accuracy.

**(1 mark)**

**3** The diagram shows triangle *ABC*.




11th

**a** Find the area of triangle *ABC*.

**(2 marks)**

10th

**b** Find the length of the side *AC*.

**(2 marks)**

8th

**5** Complete the following, inserting angles between 0° and 90° on the dotted lines.

**a** sin .....° = sin 150°

**(1 mark)**

**b** sin .....° = sin 179°

**(1 mark)**

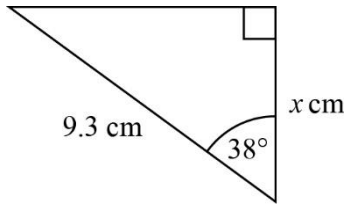
8th

**7** Write down two values of $x$ such that $\sin x = \frac{\sqrt{3}}{2}$

**(2 marks)**

10th

**9** The diagram shows a right-angled triangle. 9.3 cm is correct to 1 decimal place.
38° is correct to the nearest degree.




**a** Find the upper bound for $x$.

**(2 marks)**

**b** Find the lower bound for $x$.

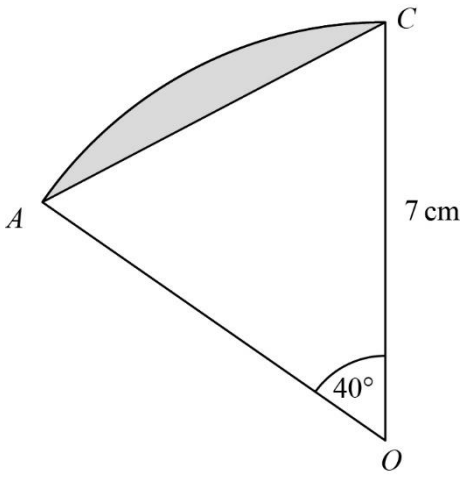
**(2 marks)**

**c** Write the value of $x$ to a suitable degree of accuracy.

**(1 mark)**

11th

**11** $AOC$ is a sector of a circle, centre $O$.



**Q11**

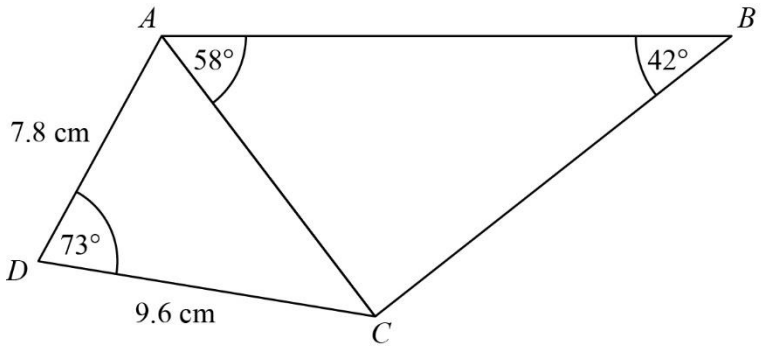
Find the shaded area.

Give the correct units with your answer.

**(5 marks)**

12th

**13** The diagram shows a quadrilateral *ABCD*.




Work out the length of the side *BC*.

**(5 marks)**

8th

**15** Solve the equation $2\cos x = 1$ for $0° \leqslant x \leqslant 360°$

**(2 marks)**

| **Overall mark** | **/50** |
|---|---|