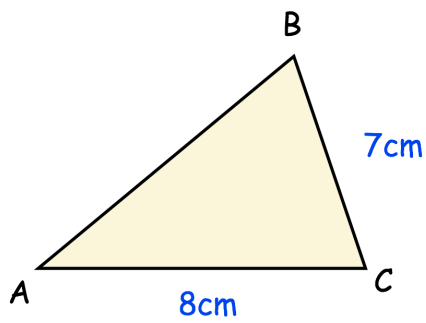


13th August



Corbettmaths



The area of the triangle  $14\sqrt{3}$  cm<sup>2</sup>

Find the size of angle ACB

$$\mathbf{B} = \begin{pmatrix} 4 \\ 3 \end{pmatrix}$$

Given  $k\mathbf{B} = \begin{pmatrix} 2k + 15 \\ k + 15 \end{pmatrix}$  where  $k$  is a constant, work out the value of  $k$

$$y = ax^3 - x^2$$

Given  $\frac{d^2y}{dx^2} = -23$  when  $x = -\frac{1}{2}$

Find the value of  $a$