

13 Solve the equation  $\sqrt{4x^2 + 45} = 3x$  where  $x > 0$

$x = \dots\dots\dots$

(Total for Question 13 is 3 marks)

14 Here is a right-angled triangle.

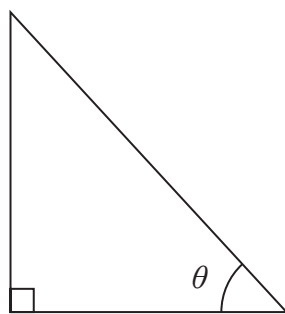


Diagram **NOT**  
accurately drawn

Given that  $\tan \theta = \sqrt{8}$

express  $3(\sin \theta + \cos \theta)$  in the form  $m + \sqrt{n}$  where  $m$  and  $n$  are integers.

Show your working clearly.

(Total for Question 14 is 3 marks)

