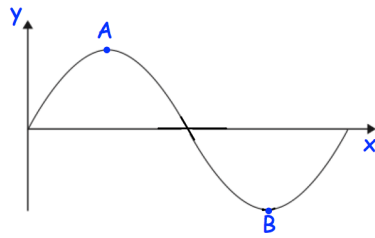


**18th December**

Corbettmaths



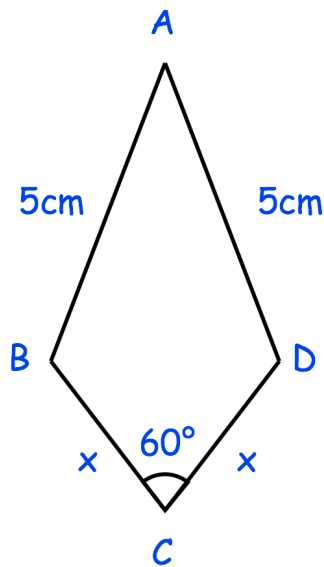
Shown is the curve  
 $y = 3\sin x$

Write down the coordinates of A and B

$$x^2 < 16 \quad \text{and} \quad x + 4y = 10$$

Work out the range of possible values of  $y$ .

Shown is kite ABCD



Prove

$$\cos BAD = 1 - \frac{x^2}{50}$$

Solve

$$\frac{81^{2-x}}{27^{2x+3}} = 3$$