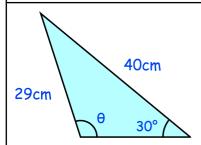
30th August



Find the two possible values of θ

Write down the equation of the tangent to the circle $x^2 + y^2 = 25$ at the point (3, 4)

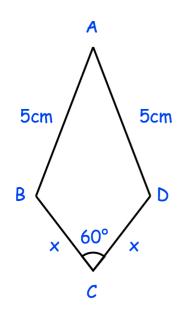
There are 9 counters in a bag.

5 of the counters are red 4 of the counters are white.

Tom takes at random three counters from the bag.

Work out the probability that the counters are all the same colour.

Shown is kite ABCD



Prove

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