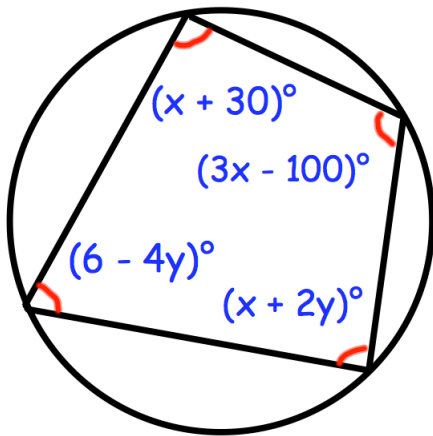




James is creating a 8-digit code to lock his iPad.

He does not repeat any digit.

How many possible codes can James create?



Shown is a cyclic quadrilateral.

Work out the values of x and y .

Prove $(n + 10)^2 - (n + 5)^2$ is always a multiple of 5

The graph of $y = c + d^x$ passes through the points $(1, 7)$ and $(3, 127)$.

c and d are positive integers.

Find the values of c and d