

**17th May**

Corbettmaths

How many 6 digit even numbers, less than 700,000 can be made using the digits

1 2 4 6 7 8

with no repetition?

Solve

$$\sqrt{300} + \sqrt{27} = \sqrt{y} + \sqrt{108}$$

The circle C has equation

$$(x - 3)^2 + (y + 4)^2 = 25$$

Find where C crosses the y-axis.

Solve  $\frac{32^{x-20}}{8^x} = 16$

A straight line, L, is perpendicular to the tangent of  $y = x^2 + x + 8$  at the point where  $x = -1$

L passes through the point  $(-8, -3)$

Find the equation of L