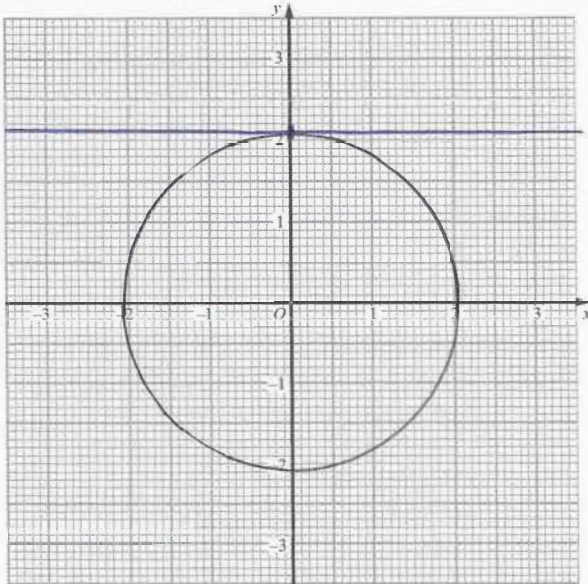


28th April



Corbettmaths

Draw $x^2 + y^2 = 4$

$$r = 2$$

Write down the equation of the tangent of the circle at (0, 2)

$$y = 2$$

Hours, h	Frequency
$0 < h \leq 5$	27
$5 < h \leq 10$	44
$10 < h \leq 15$	21
$15 < h \leq 20$	8

+
100

Two students are selected at random. Find the probability that both students revise for more than 15 hours.

$$\frac{8}{100} \times \frac{7}{99} = \frac{14}{2475}$$

Find the possible values of x

$$27^x = 3^{x^2}$$

$$(3^3)^x = 3^{x^2}$$

$$3^{3x} = 3^{x^2}$$

$$x^2 = 3x$$

$$x^2 - 3x = 0$$

$$x(x-3) = 0$$

$$x = 0 \quad \text{or} \quad x = 3$$

Find the coordinates of the maximum point of the curve

$$y = -x^2 + 6x - 1$$

$$y = -(x^2 - 6x + 1)$$

$$y = -((x-3)^2 - 9 + 1)$$

$$y = -((x-3)^2 - 8)$$

$$y = -(x-3)^2 + 8$$

$$(3, 8)$$