

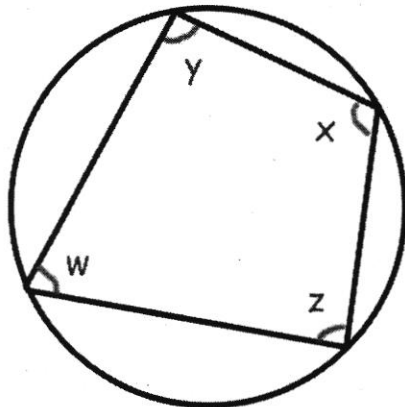
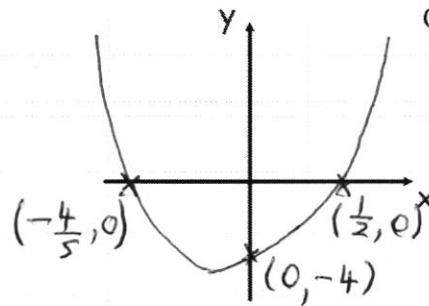
4th September



Corbettmaths

Sketch the graph of
 $y = 10x^2 + 3x - 4 = (5x+4)(2x-1)$

clearly show the coordinates of any points of intersection with the axes.



$$w : x = 2 : 3$$

$$x : y = 9 : 8$$

Work out the size of angle z.

$$\frac{w}{x} = \frac{2}{3} \Rightarrow 3w = 2x$$

$$\frac{x}{y} = \frac{9}{8} \Rightarrow 8x = 9y$$

$$w + x = 180^\circ \Rightarrow 3w + 3x = 540^\circ$$

$$\Rightarrow 2x + 3x = 540^\circ$$

$$\Rightarrow 5x = 540^\circ$$

$$\Rightarrow x = 108^\circ$$

$$w = 72^\circ$$

$$8x = 9y \Rightarrow y = 96^\circ$$

$$y + z = 180^\circ \Rightarrow \underline{z = 84^\circ}$$

$$0 < p < 1$$

How many solutions does
 $\sin x = p - 2$ have between
 $0^\circ < x < 360^\circ$?

$$0 < p < 1 \Rightarrow -2 < p - 2 < -1$$

$$-1 \leq \sin x \leq 1$$

so none.

A pizza parlour sells 10 different toppings.
 Beth orders a pizza with 3 different toppings.

How many different pizzas can she choose from?

$$\frac{10 \times 9 \times 8}{3 \times 2 \times 1} = \underline{120} \quad [{}^{10}C_3]$$