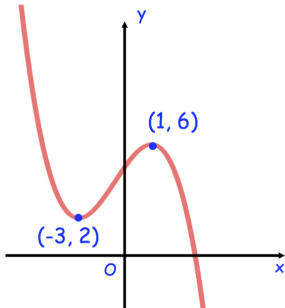


25th July

Corbettmaths

Shown below is the graph of $y = f(x)$

The point $(-3, 2)$ is a minimum point and the point $(1, 6)$ is a maximum point.



Write down the range of values of x for which $f(x)$ is a decreasing function.

Solve the simultaneous equations

$$x + y + z = 1$$

$$4x - 3y + 4z = 32$$

$$x - 10y - 2z = 27$$

Solve $2\sin^2\theta + 3\cos\theta = 3$ for $0^\circ < \theta < 360^\circ$