

7th February

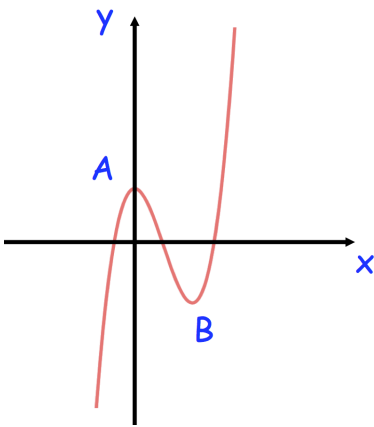
Corbettmaths

A circle has equation
 $(x - 6)^2 + (y + 2)^2 = 40$

State, with a reason, whether this circle intersects the y-axis

How many solutions of $\tan x = k$,
where $k > 0$, are between 0° and 450° ?

A curve has equation
 $y = x^3 - 3x^2 + 1$



Work out the coordinates of the stationary points, A and B.

Solve $\frac{3}{x^2} - \frac{5}{x} - 12 = 0$