

2nd October

Corbettmaths

 $f(x) = 2x - 7$ for all values of x Solve $f(x^2) = 4x - 1$

AB is a diameter of a circle C.
Q is the centre of the circle
A has coordinates $(-2, 12)$ and B has coordinates $(8, 2)$.

Find the equation of C

Find the equation of the tangent to C at the point A.

Find the values of x for which
 $y = 10 + 2x^2 - 4x^3$ is an increasing
function.

Describe fully the **single** transformation
represented by $\begin{pmatrix} -1 & 0 \\ 0 & -1 \end{pmatrix}$