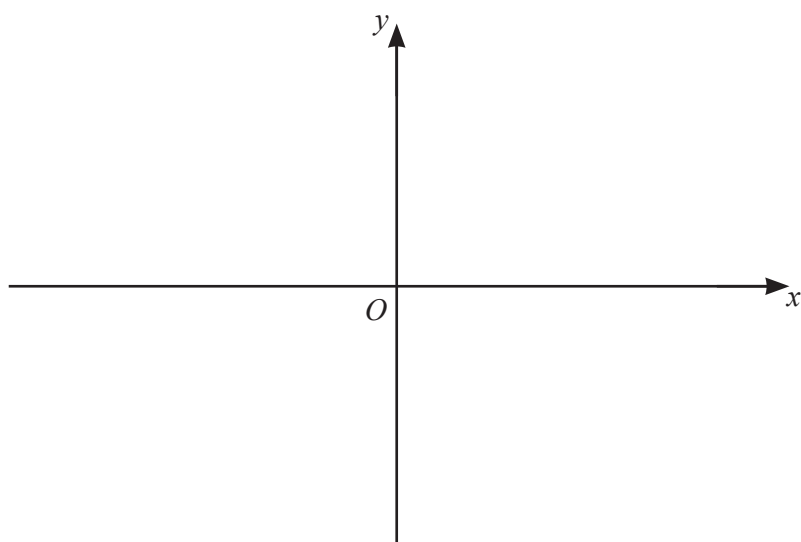


12 (a) Solve the equation $\tan x = 11.43$ for $0^\circ \leq x \leq 360^\circ$.

$x = \dots\dots\dots$ or $x = \dots\dots\dots$ [2]

(b) Sketch the curve $y = x^3 - 4x$.



[3]

- (c) A curve has equation $y = x^3 + ax + b$.
The stationary points of the curve have coordinates $(2, k)$ and $(-2, 10 - k)$.

Work out the value of a , the value of b and the value of k .

$a = \dots\dots\dots$, $b = \dots\dots\dots$, $k = \dots\dots\dots$ [6]