

24th March



Corbettmaths

$$\int \sqrt{x + 4x^2 - 1} \, dx$$

A sequence a_1, a_2, a_3, \dots is defined as

$$a_1 = 2$$

$$a_{n+1} = \sqrt{a_n^2 + 5}$$

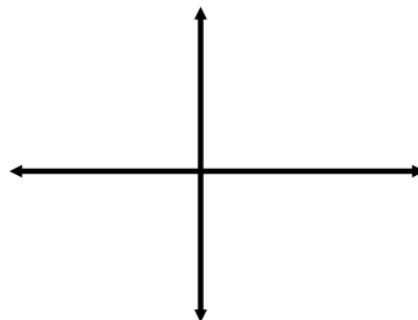
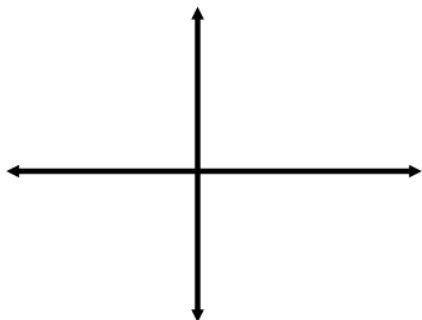
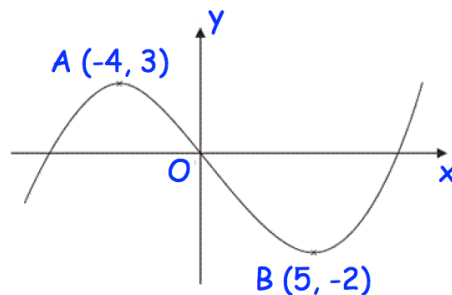
Find a_2 and a_3

Shown is a sketch of a curve with equation $y = f(x)$

Sketch

(a) $y = f(x - 2)$

(b) $y = f(\frac{1}{2}x)$



The graph of $y = f(x) - a$ has a maximum point at $(-4, 0)$

Write down the value of a .