

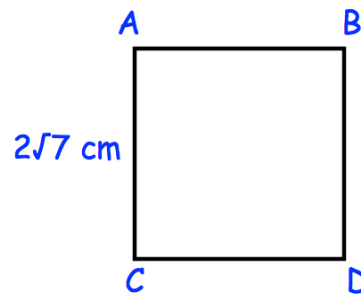
20th May



Corbettmaths

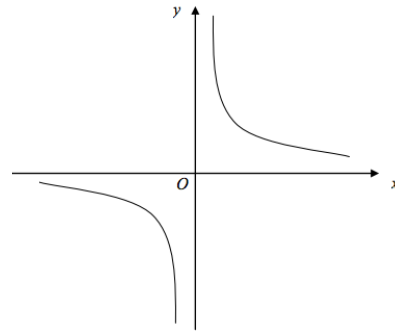
The square ABCD has side length $2\sqrt{7}$ cm.

Find the length of AD.



Shown is the graph

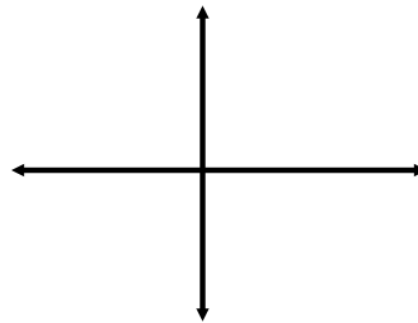
$$y = \frac{2}{x}$$



Sketch

$$y = \frac{2}{x+1}$$

Write down the equations of the asymptotes



In an arithmetic progression, the first term is 18 and the sum of the first 30 terms is -112.5 .

Find the common difference

The equation $2kx^2 + kx - 1 = 0$ has two distinct real roots.

Find the possible range of values for k .