

28th October

Corbettmaths

A sequence is defined by the term-to-term rule

$$u_{n+1} = 5u_n + 2$$

$$u_2 = 22$$

Find u_1

Make x the subject of

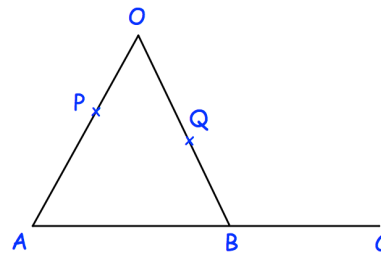
$$y = \frac{c}{(x + b)^3}$$

The numbers a , b and c are irrational numbers and not equal.

abc is rational.

Write down possible values of a , b and c

Find the vector \vec{OB} in terms of \mathbf{a} and \mathbf{b}



AOB is a triangle.

P is a point on AO.

$$\vec{AB} = 2\mathbf{a}$$

$$\vec{AO} = 6\mathbf{b}$$

$$AP:PO = 2:1$$

Q is the midpoint of OB.
B is the midpoint of AC.
Show PQC is a straight line.