Corbettmαths

A sequence of numbers is formed by the iterative process

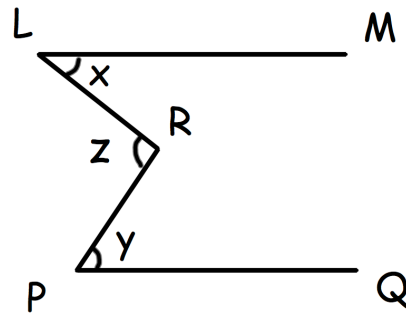$$a_{n+1} = (a_n)^2 - 10$$

$$a_1 = 3$$

Find

$$a_3$$

LM and PQ are parallel

Prove x + y = z

Ethan has 12 coins.
There are three 10p coins and nine 20p coins.
Ethan chooses 3 coins at random.

Work out the probability that he takes exactly 50p.

Solve

$$3^{4x} = 27^{5-x}$$

Find the nth term for the sequence

0 9 20 33 48