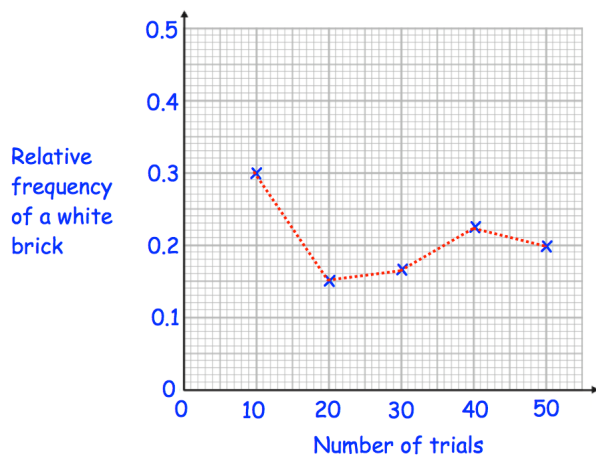


27th June



Corbettmaths



James has a box containing 4000 lego bricks.

James picks a brick at random and replaces the bricks in the box.

He does this 50 times and calculates the relative frequency of a white after every 10 trials.

- (a) What is the best estimate of the probability of choosing a white brick? Explain your answer.
- (b) Estimate how many white bricks are in the box.

Factorise  $x^2 - 6x - 27$

Line 1 has gradient 4 and passes through the point (2, 10).

What is its equation?

The ratio of red to green sweets in a bag is 3:2

If  $r$  is the number of red sweets and  $g$  is the number of green sweets in the bag, work out a formula for  $r$  in terms of  $g$ .