

2nd December

Corbettmaths

Solve the simultaneous equations

$$\frac{1}{4}y = x$$

$$y = x^2 + 3$$

The Venn diagram shows information about cars in a car park.

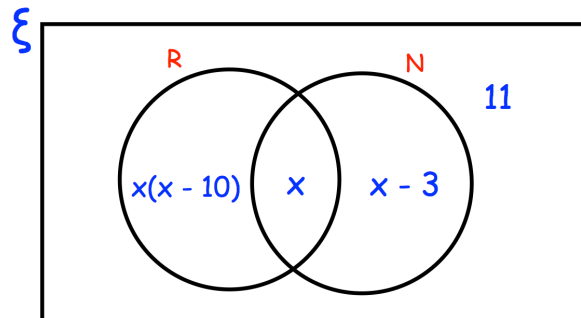
$\xi = 73$ cars in the car park

R = red cars

N = cars under 4 years old

A car is chosen at random.

Given it is under 4 years old, find the probability that it is Red.



Find the first 3 terms of the sequence $n^2 - 4n + 25$

Prove every term in the sequence $n^2 - 4n + 25$ is positive.

A solid sphere is made from a material of density 5.4g/cm^3 to the nearest 1 decimal place.

The mass of the sphere is 3000kg to 2 significant figures.

Find the difference between the smallest and largest possible lengths for the radius.