

15th January



Corbettmaths

Factorise completely

$$x^3 - 25x \quad x(x^2 - 25)$$

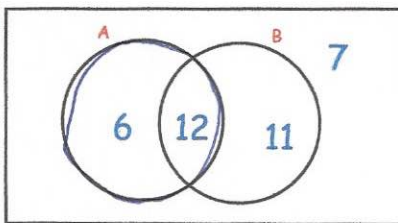
$$x(x-5)(x+5)$$

The square of  $w$  is 5Write down the value of  $w^5$ 

$$w^2 = 5$$

$$w = \pm \sqrt{5}$$

$$w^5 = \pm 25\sqrt{5}$$

 $\xi$ 

Find the probability of B given A.

$$\frac{12}{18} = \frac{2}{3}$$

Weight ( $x$ kg)	Frequency
$60 < x \leq 64$	10
$64 < x \leq 68$	20
$68 < x \leq 72$	30 ✓
$72 < x \leq 76$	15
$76 < x \leq 80$	18
$80 < x \leq 84$	7

100

50<sup>th</sup> value

Calculate an estimate of the median

$$68 + \frac{20}{30} \times 4$$

$$= 70.6$$

A curve has equation  $y = ax^2 + bx + c$ The curve crosses the  $x$ -axis at (3, 0) and (4, 0)The curve crosses the  $y$ -axis at (0, 12)Find the values of  $a$ ,  $b$  and  $c$ .

$$y = (x-3)(x-4)$$

$$y = x^2 - 7x + 12$$

$$a = 1 \quad b = -7 \quad c = 12$$