



A dog runs 400 metres in 50 seconds.

Calculate the average speed of the dog in m/s

$$s = d \div t$$

$$400 \div 50 = 8 \text{ m/s}$$

Write the average speed of the dog in km/h

$$8 \text{ m/s}$$

$$480 \text{ m/min}$$

$$28800 \text{ m/hour}$$

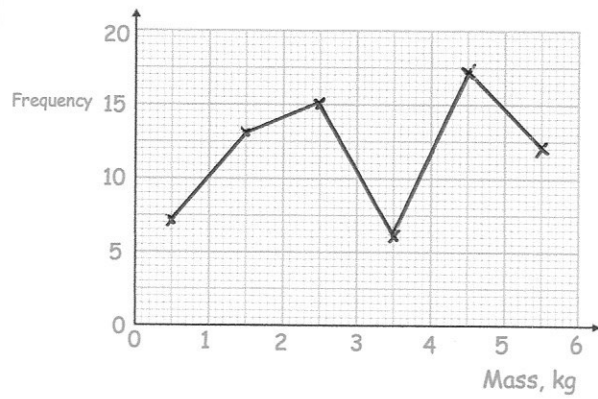
$$28.8 \text{ km/h}$$

Here are the weights of some puppies

Mass, kg	Frequency
$0 < m \leq 1$	7
$1 < m \leq 2$	13
$2 < m \leq 3$	15
$3 < m \leq 4$	6
$4 < m \leq 5$	17
$5 < m \leq 6$	12
$70$	

} 20  
} 50

Draw a frequency polygon



What percentage of the puppies weigh over 2 kilograms?

$$\frac{50}{70} = 71.428... \%$$

Nicky rolls a fair six-sided dice 50 times. He records the results however he misses two frequencies.

The mean is 3.3

$$x + 3y + 108 = 165$$

$$x + 3y = 57$$

Find the two missing numbers.

$$x = 9$$

$$y = 16$$

Number	Frequency	$fx$
1	$x$	$x$
2	6	12
3	$y$	$3y$
4	4	16
5	10	50
6	5	30
$50$		$x + 3y + 108$

Work out the value of  $x^3 - 4x - 3$  when  $x = -1.5$

$$(-1.5)^3 - 4(-1.5) - 3$$

$$= -0.375$$