Name: _____ 5-a-day Higher Plus

13th February

Corbettmaths

4 blue socks and 6 black socks are in a drawer.
Keith takes out two socks at random.
Work out the probability that Keith takes out two socks are different colours.

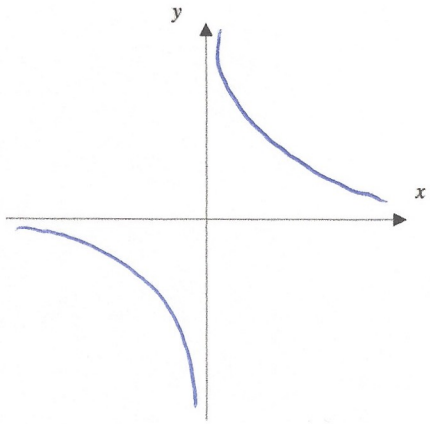
$P(\text{blue/black}) = \frac{4}{10} \times \frac{6}{9} = \frac{24}{90}$

$P(\text{black/blue}) = \frac{6}{10} \times \frac{4}{9} = \frac{24}{90}$

$\frac{48}{90} = \frac{8}{15}$

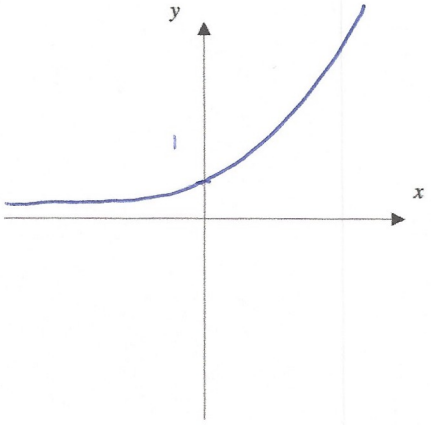
Sketch

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

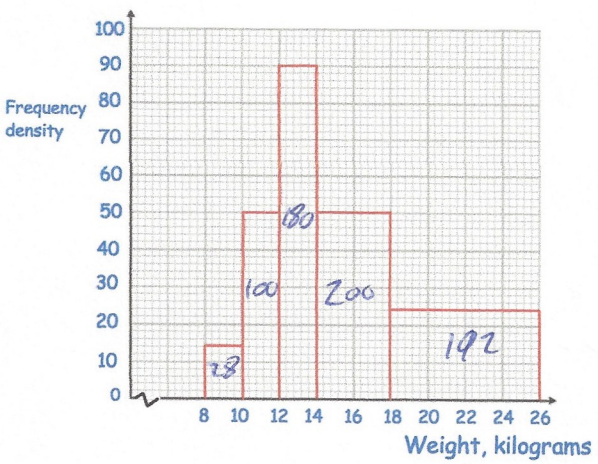


Sketch

$$y = 4^x$$



The histogram shows the weights of 700 dogs.



Calculate an estimate of the median.

$14 + \frac{42}{200} \times 4$

14.84

Calculate an estimate of the mean.

Weight	Frequency	fx
$8 \leq x < 10$	28	252
$10 \leq x < 12$	100	1100
$12 \leq x < 14$	180	2340
$14 \leq x < 18$	200	3200
$18 \leq x < 26$	192	4224
		11116

$11116 \div 700 = 15.88$