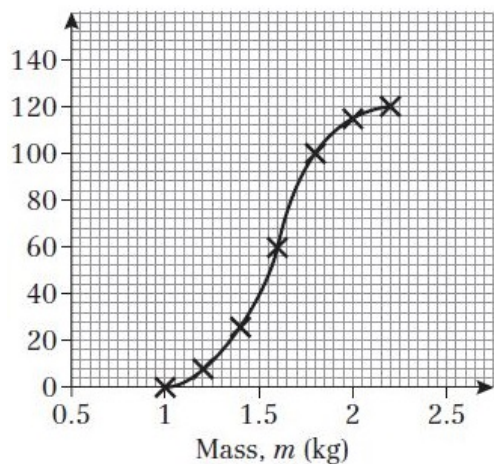


Representations of data 3C

1 a Cumulative frequencies are: 7, 25, 59, 100, 115, 120



b 1.6 kg

c $Q_1 = 1.43$ kg

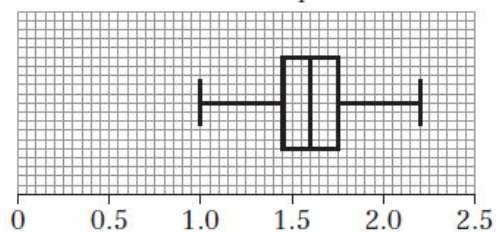
$Q_3 = 1.75$ kg

$IQR = 1.75 - 1.43 = 0.32$ kg

$P_{90} - P_{10} = 1.9 - 1.25 = 0.65$ kg

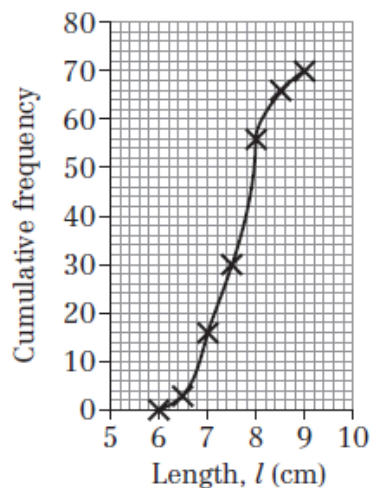
d

Masses of Coulter pine cones



2 a Cumulative frequencies are:

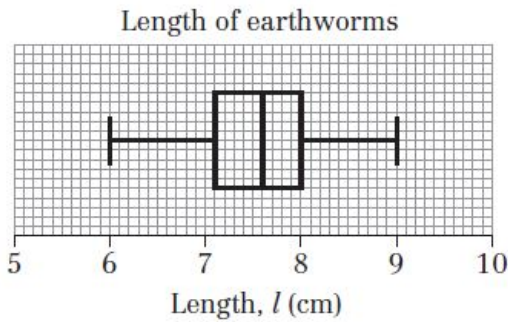
3, 16, 30, 56, 66, 70



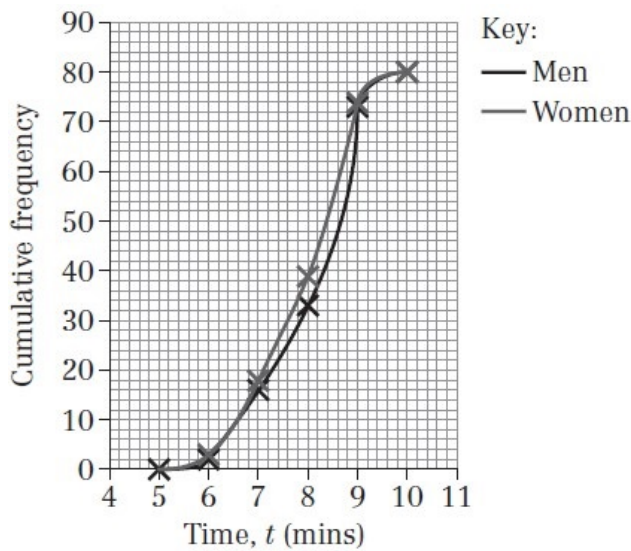
- 2 b Median = 7.6 cm
 $Q_1 = 7.1$ cm
 $Q_3 = 8$ cm

- c i $70 - 62 = 8$
 ii 24

d



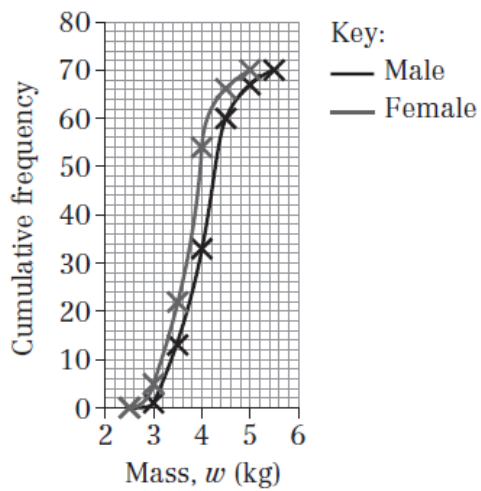
- 3 a Cumulative frequencies for men are: 2, 16, 33, 73, 80
 Cumulative frequencies for women are: 3, 18, 39, 74, 80



- b Median for men is 8.2 mins
 Median for women is 8 mins
 Women have the lower median time.
- c IQR for men is $8.9 - 7.2 = 1.7$ mins
 IQR for women is $8.6 - 7.1 = 1.5$ mins
 Men have the greater spread of times.
- d 24 men and 28 women

- 4 a Cumulative frequencies for males are: 1, 13, 33, 60, 67, 70
 Cumulative frequencies for females are: 5, 22, 54, 66, 70, 70

4 a



- b** IQR for males is $4.4 - 3.6 = 0.8$ kg
 IQR for females is $4 - 3.4 = 0.6$ kg

Males have the greater spread of masses.

- c** There are approximately 12 underweight females, and 25 underweight males.

There are fewer female underweight cats.