

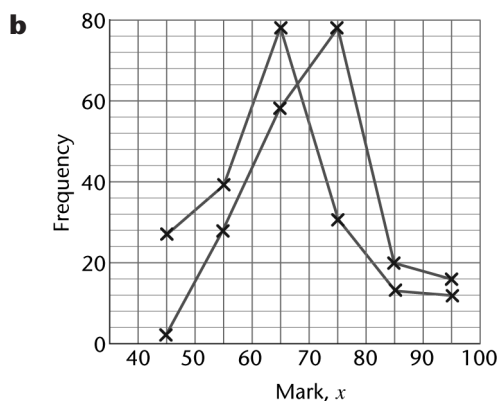
# Statistics 1 answers

## Page 4

- 1 a 2  
 b 2  
 c 1.8 *(1 mark for total of 180)*
- 2 a 0  
 b 1  
 c 1.4 *(1 mark for 70)*  
 d There are bigger numbers in top half of table

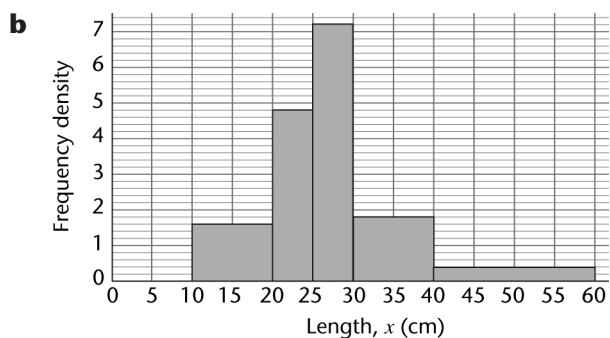
## Page 5

- 1 a 65 *(1 mark for total 13000)*



- c Girls did better; polygons are about the same shape and girls are about 10 marks better

- 2 a 1.5, 4.8, 7.2, 1.8, 0.35

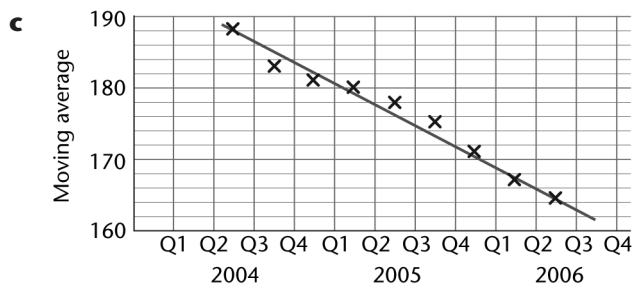


**Remember:** Check which grade you are working at.

**Page 6**

**1 a** Because there are 4 quarters and seasons in a year

**b** 188



**d** 190 (1 mark for  $4 \times 162 - (158 + 120 + 180)$ )

**2 a**

	<b>Boys</b>	<b>Girls</b>
$0 < \text{time (hours)} \leq 4$		
$4 < \text{time (hours)} \leq 6$		
$6 < \text{time (hours)} \leq 8$		
$8 < \text{time (hours)} \leq 10$		
More than 10 hours		

(1 mark for times or for boys/girls)

**b** Not really; the difference is not that large and the sample of girls was too small

**Page 7**

**1 a** 94.8p

**b** 2006; price index shot up

**c** Faster; petrol has increased by 58%

**2 a** Any from: sample too small; sample not representative; sample not random; conclusion incorrect, rounds to 6 out of 10

**b** Question not specific

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# Statistics 2 answers

## Page 8

1 a 10am–11am

b 11am

c 25 °C

d No; anything could happen in 4 hours it is too far from the end of the graph

2 a 30

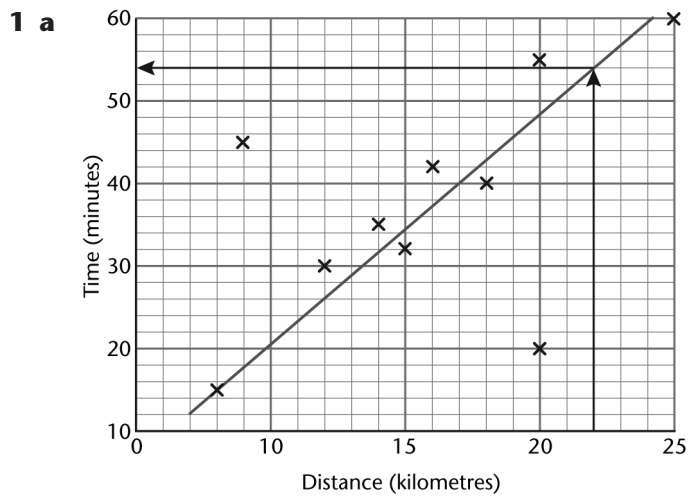
b 9.6

*(1 mark for 288)*

**Remember:** Check which grade you are working at.

# Scatter diagrams answers

## Page 9



(1 mark for 8 or 9 values correctly plotted)

- b i** G
- ii** I
- c** (See graph)
- d** 54 minutes

**Remember:** Check which grade you are working at.

# Cumulative frequency and box plots answers

## Page 10

- 1 a**  $3\frac{1}{4}$  minutes (3 m 15 s)  
**b** 1.4 minutes (1 m 24 s)  
**c** 48
- 2 a** 12  
**b** 52  
**c** 10K higher median; highest score  
**d** 10J smaller interquartile range; smaller range

**Remember:** Check which grade you are working at.

# Probability answers

## Page 11

- 1 a** 0.15, 0.06, 0.18, 0.18, 0.29, 0.14  
**b** 5; as this had a much higher relative frequency
- 2 a** Because they cannot happen at the same time  
**b** Because their probabilities add up to 1  
**c** The probability of red is  $\frac{2}{5}$   
**d** 12  
**e** 80

## Page 12

- 1 a** 22  
**b** PE  
**c** Maths  $\frac{5}{12} \approx 42\%$ ; Science  $\frac{7}{18} \approx 39\%$   
**d**  $\frac{12}{40} = \frac{3}{10}$
- 2 a** 0.24  
**b** 1200  
**c** 6240

**Remember:** Check which grade you are working at.

## Page 13

1 a

		First score			
		1	2	3	4
Second score	1	2	2	4	4
	2	2	4	6	8
	3	4	6	6	12
	4	4	8	12	16

b 1

c  $\frac{6}{16} = \frac{3}{8}$

2 a  $\frac{7}{10}, \frac{3}{10}, \frac{7}{10}$

b  $\frac{9}{100}$

c  $\frac{42}{100} = \frac{21}{50}$

## Page 14

1 a  $\frac{1}{5}$

b 24

c 18

2 a  $1 - x$

b  $x^3$

3 a  $\frac{4}{6}, \frac{1}{5}, \frac{4}{5}, \frac{2}{5}, \frac{3}{5}$

b  $\frac{14}{30} = \frac{7}{15}$

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