Statistics 1 answers

HANDLING DATA

Page 4
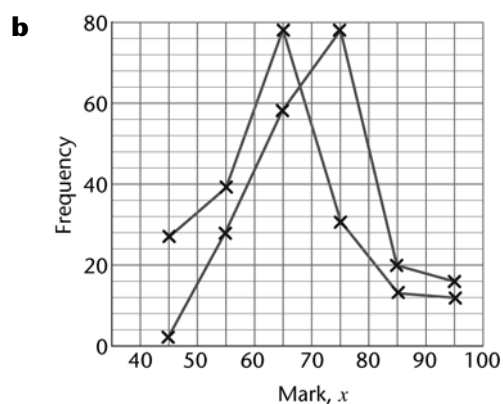
1 a   2

  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

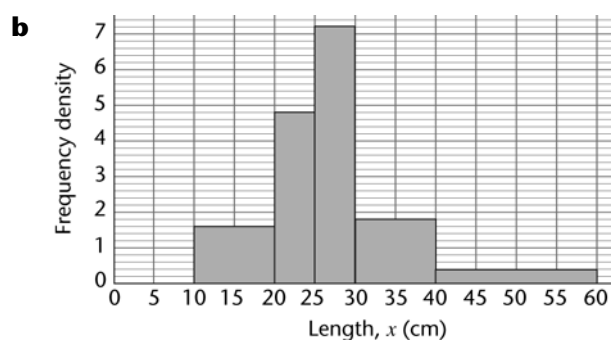## Page 5

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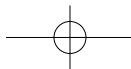
  b

  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
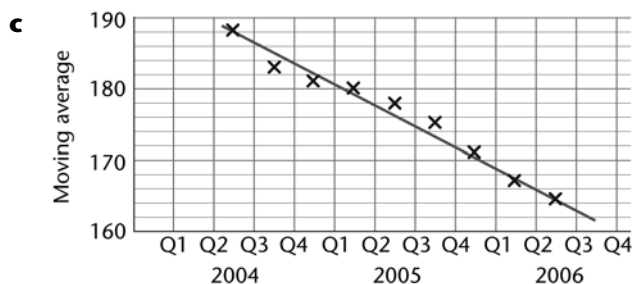
  b

Remember: Check which grade you are working at.

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

  b   188

  c

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

2 a

	Boys	Girls
0 < time (hours) ⩽ 4		
4 < time (hours) ⩽ 6		
6 < time (hours) ⩽ 8		
8 < time (hours) ⩽ 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

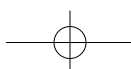## Page 7

1 a   94.8p

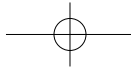 **b**   2006; price index shot up

  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

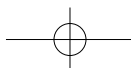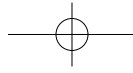**Remember:**   Check which grade you are working at.

Statistics 2 answers

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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

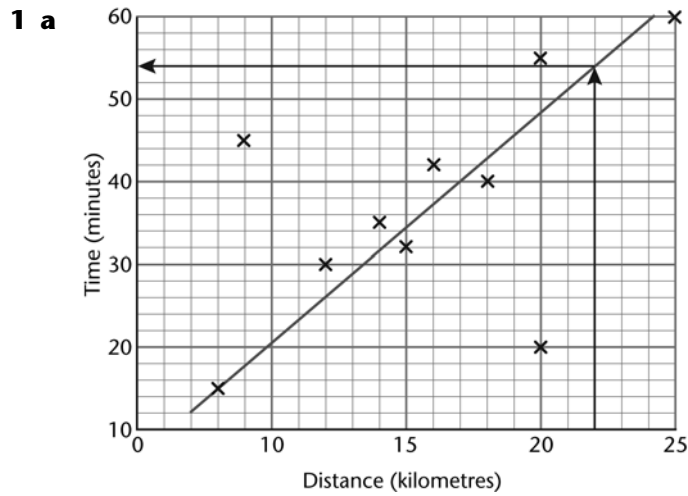   **b**   9.6   *(1 mark for 288)*

Remember: Check which grade you are working at.
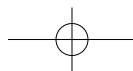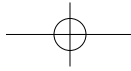
Scatter diagrams answers

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1 a

(1 mark for 8 or 9 values correctly plotted)

b i G

  ii I

c *(See graph)*

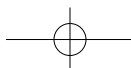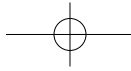**d** 54 minutes

HANDLING DATA

Cumulative frequency and box plots answers

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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

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HANDLING DATA

Probability answers

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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

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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

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1 a

		First score			
		1	2	3	4
Second	1	2	2	4	4
	2	2	4	6	8
score	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 $\frac{42}{100} = \frac{21}{50}$

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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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