

- 6 (a) This stem and leaf diagram shows the times it took students in class 11S to get from home to school one day.

0	3	5	7	9				
1	1	1	2	2	3	5	6	8
2	1	4	4	4	9			
3	0	1	4	8				
4	1	7						

Key: 3 | 1 = 31 minutes

- (i) What was the time for the longest journey?

(a)(i) ..... minutes [1]

- (ii) What was the modal time?

(ii) ..... minutes [1]

- (iii) How many students were there in the class?

(iii) ..... [1]

- (b) In class 7P, the probability that a student takes 10 minutes or more to get to school is 0.8.

What is the probability that a student in class 7P takes less than 10 minutes to get to school?

(b) ..... [1]

4

7 (a) Simplify.

$$5 \times p \times p \times p$$

(a) ..... [1]

(b) Factorise.

$$6c + 3d$$

(b) ..... [1]

2

8 Calculate.

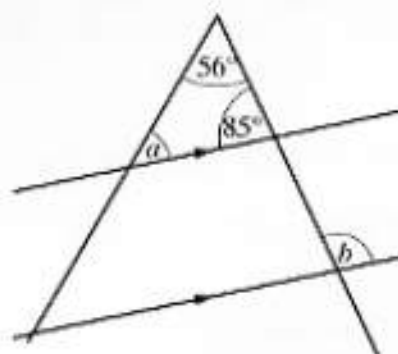
$$\frac{3.42 \times 4.2}{3.8^4}$$

Give your answer correct to 3 decimal places.

..... [2]

2

9



Not to scale

Find angles  $a$  and  $b$ , giving your reasons. $a = \dots\dots\dots^\circ$  because .....

[2]

 $b = \dots\dots\dots^\circ$  because .....

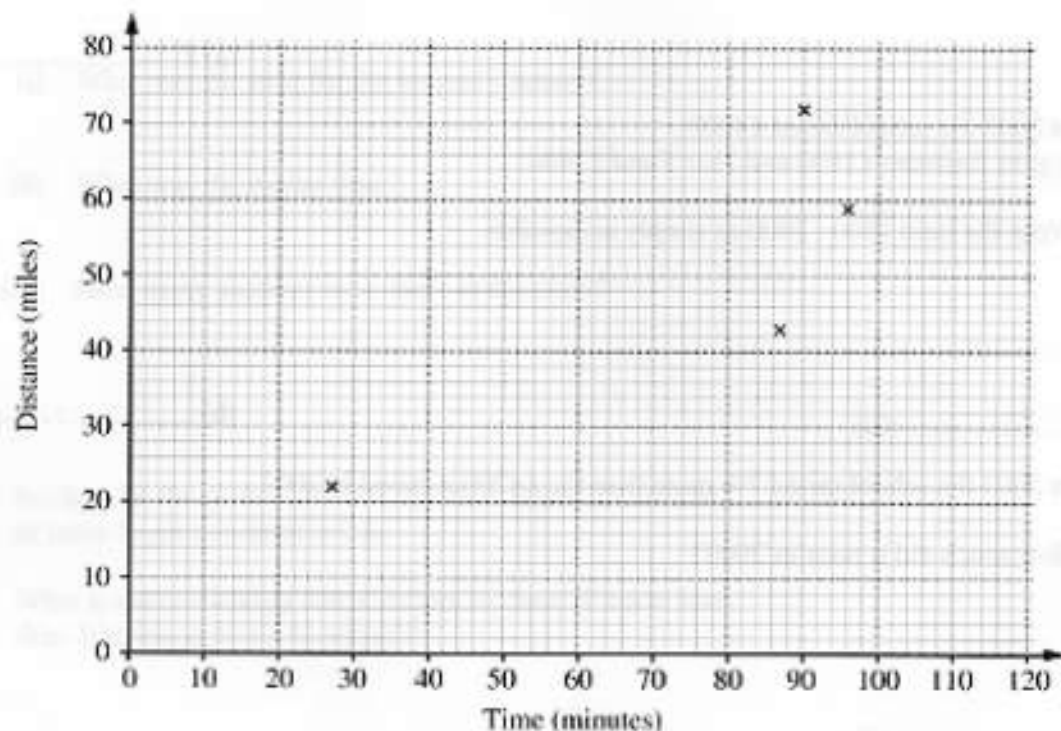
[2]

4

- 10 (a) Here are the times and distances for 8 people who travelled by car to a meeting.

Time (minutes)	90	87	27	96	114	60	45	36
Distance (miles)	72	43	22	59	20	48	30	17

- (i) Complete the scatter diagram to show this information.  
The first 4 points have been plotted for you.



[2]

- (ii) Eddie arrived late because of an accident on the motorway.

Circle the point most likely to represent Eddie's journey.

[1]

- (b) Jill also went to the meeting.  
The mileage display in her car had these readings.

Start of journey 15672  
End of journey 15758

Her journey took 2 hours 30 minutes.

Calculate her average speed.

(b) .....miles per hour [3]

6
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17/11/2011

11 Seaton School raises funds to give to charity.

- (a) In 2001 it gave money to *GOSH* and *Help the Aged*.  
*GOSH* was given twice as much as *Help the Aged*.  
*GOSH* was given £1750.

How much did the school raise altogether for charity in 2001?

(a) £..... [2]

- (b) In 2002 the school raised £4200.  
 It gave *Sustrans* £1800 and *Tear Fund* £2400.

Write the ratio 1800 : 2400 as simply as possible.

(b) ..... : ..... [2]

- (c) In 2003 the school raised 7% more than the £4200 it raised in 2002.

How much did it raise in 2003?

(c) £..... [3]

2
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