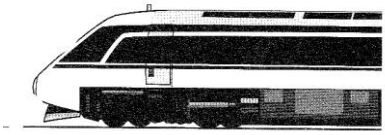
CALCULATOR ALLOWED

	KU	RE

1 A night train from London to Edinburgh leaves at 2321 and arrives at 0651.



a) How long does the train journey take ? **2**

b) The distance from London to Edinburgh is 644 kilometres.
Find the average speed of the train in kilometres per hour.
Give your answer correct to one decimal place. **3**

2. The marks of a group of pupils in a maths test are shown below.

43	17	25	25	29	31	32	11	26	20
25	42	32	33	25	28	41	35	32	26

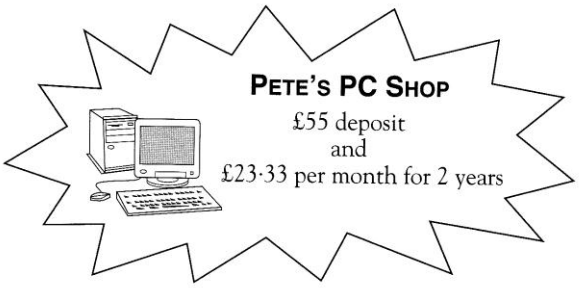
a) Illustrate this data in an ordered stem and leaf diagram. **3**

b) What is the mode for the above data ? **1**

3. Scott sees the following notice in the window of the Big Computer Shop.

a) A computer was £834.
How much would Scott pay for it in the sale ? **2**

b) The same computer can be bought in Pete's PC Shop on hire purchase.

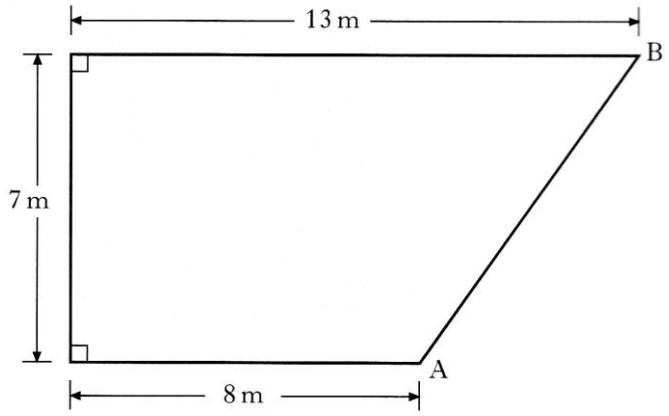


Which shop sells the computer cheaper ?
Show your working. **3**

KU	RE

4. The diagram below shows the shape of Sangita's garden.

Sangita plants a hedge along side AB.



Calculate the length of the hedge. **4**

5. a) Remove the brackets and simplify.

$$5+3(2x-5)$$ **2**

b) Solve the inequality

$$3x-5 \geq 13$$ **2**

6. The sponsors of the Champions league have given £900 000 to be shared among the four competing teams.

The league table is shown below.

The teams share the money in the ratio of the **points** they gain.

How much is **United's** share of the money ?

	Played	**Won**	**Lost**	**Drawn**	**Points**
Inter	3	3	0	0	**9**
Athletic	3	2	1	0	**6**
United	3	1	2	0	**3**
Red Star	3	0	3	0	**0**

4

KU	RE

7. The diagram below shows Isla MacGregor's electricity bill.

ScoPower Electricity			
Ms I McGregor 8 Birch Grove Pineford		Account No: 050621743X	
Statement Date: 20 April 2005	From: 21 Feb 2005	To: 18 Apr 2005	
Present reading	**Previous reading**	**Details of charges**	£
006890	006487	**Box A** units at 7·567p per unit	.
		Standing Charge	9·21
		Sub Total	.
		VAT @ 5%	.
		Total Charge	.

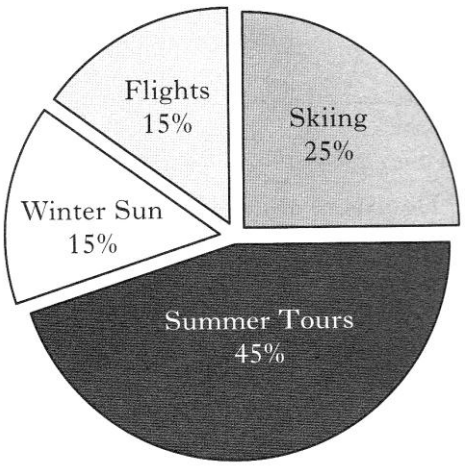
a) Calculate the number of units used.

Write your answer in **Box A**. **1**

b) Complete the electricity bill by filling in the shaded boxes. **3**

8. eSun Tours is a holiday company.

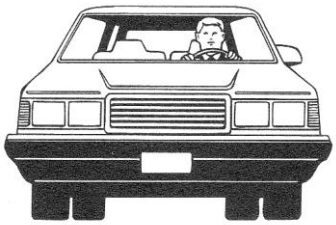
Last year's percentage income from Skiing, Summer Tours, Winter Sun and Flights is shown in the pie chart.

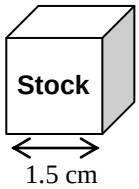


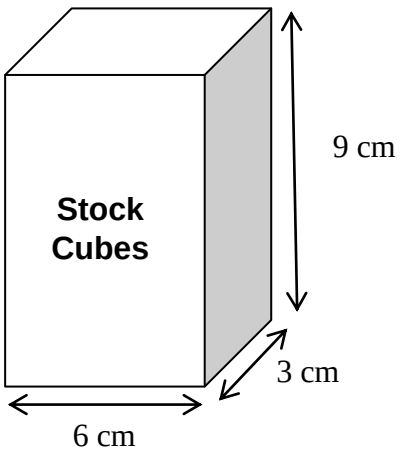
The income from Winter Sun holidays was £750 000 last year.

What was eSun's total income ? **3**

	KU	RE
9. Serge drives from his home in Paris to Madrid, a journey of 1280 kilometres. His car has a 60 litre petrol tank and travels 13 kilometres per litre. Serge starts his journey with a full tank of petrol. What is the least number of times he has to stop to refuel?		**3**
10. a) The edge of a stock cube measures 1.5 centimetres. Calculate the volume of the stock cube.	**1**	
b) A number of the above stock cubes are packed into a cuboid box. The box is 6 centimetres long, 3 centimetres broad and 9 centimetres high. How many stock cubes are needed to fill the box ?		**3**







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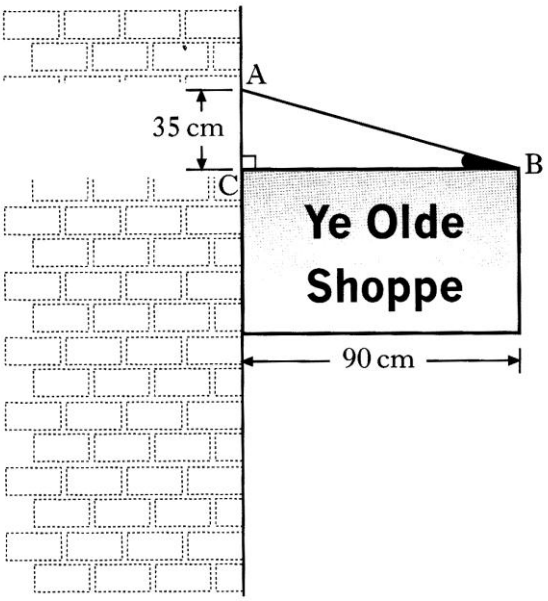
11. 

A rectangular shopping sign is supported by a metal bar AB.

The length of the shop sign is 90 centimetres and the bar AB is attached to the wall 35 centimetres above the sign.

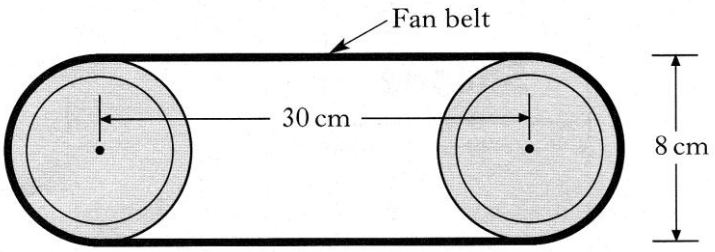
Calculate the size of the shaded angle ABC

Do not use a scale drawing. **3**

12. The diagram below shows the fan belt from a machine.

The fan belt passes around 2 wheels whose centres are 30 centimetres apart.

Each wheel is 8 centimetres in diameter.



Calculate the total length of the fan belt. **4**

END OF QUESTION PAPER

TOTALS **23** **24**