CALCULATOR ALLOWED

	KU	RE

1.   The Sharkey family is going on holiday to
      France.

      They will stay at "Prenez Les Bains"
      campsite.

Prenez Les Bains	Tent holiday		Mobile Home holiday	
Start Date	Cost for 7 nights	Cost per extra night	Cost for 7 nights	Cost per extra night
26 June – 2 July	495	39	585	58
3 July – 9 July	535	41	615	65
10 July – 30 July	645	46	825	72
31 July – 13 Aug	699	47	880	75
14 Aug – 28 Aug	670	39	845	73

The family chooses a mobile home holiday.

Their holiday will start on 15 July and the family will stay for 12 nights.
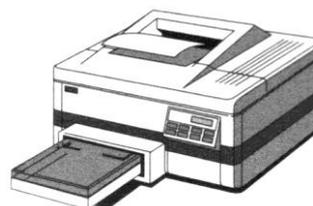
Use the table above to calculate the cost of the holiday.   **3**

2.   Carly bought a new printer for her computer.

      The time taken to print a document is proportional
      to the number of pages printed.

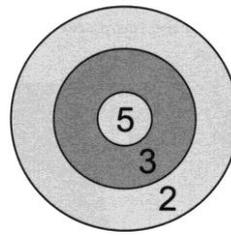   It takes 7 minutes to print a document with 63 pages.

      How many pages can be printed in half an hour?   **3**

KU	RE

3.   At a school fun day, prizes can be won by throwing darts at a target.

Each person throws **six** darts.

Points are awarded as follows:

	POINTS
Centre	5
Middle Ring	3
Outer Ring	2
Miss	0

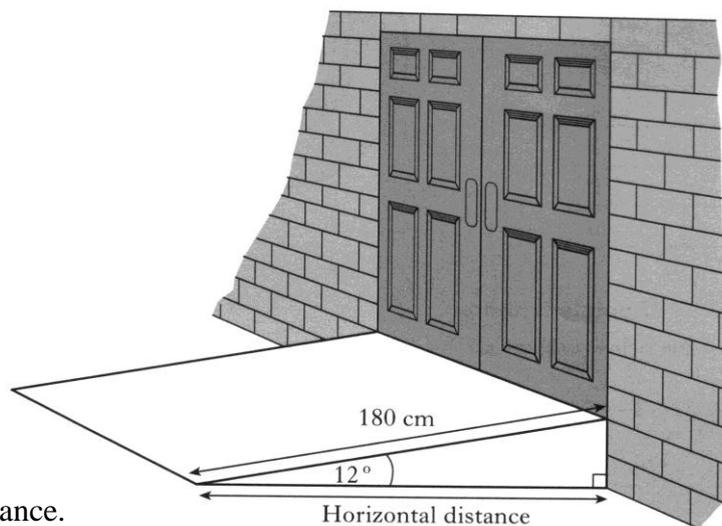Prizes are won for **25 points or more**.

Complete the table below to show all the different ways to win a prize.

Number of darts scoring 5 points	Number of darts scoring 3 points	Number of darts scoring 2 points	Number of darts scoring 0 points	Total Points
4	2	0	0	26

4.   The entrance to a building is by a ramp as shown in the diagram.

The length of the ramp is 180 centimetres.

The angle between the ramp and the ground is 12°.

180 cm

12°

Horizontal distance

Calculate the horizontal distance.

Round your answer to one decimal place.

Do not use a scale drawing.

RE column: 4 (for Q3), 4 (for Q4)

	KU	RE

5. Ann works in a hotel.

   She is paid £5.60 per hour on weekdays and double time at weekends.

   Last month her gross pay was £436.80.

   Ann worked a total of 54 hours on weekdays.

   How many hours did she work at double time?   **4**

6. (*a*) Factorise

   $$6a + 15b$$

   2

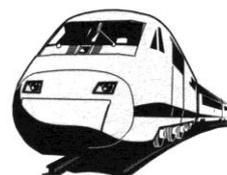   (*b*) Solve algebraically

   $$4x - 3 = x + 21$$

   3

7. Amy and Brian travel from Dundee to Stonehaven.

   The distance between Dundee and Stonehaven is 80 kilometres.

   Amy takes 1 hour 30 minutes to travel by car.

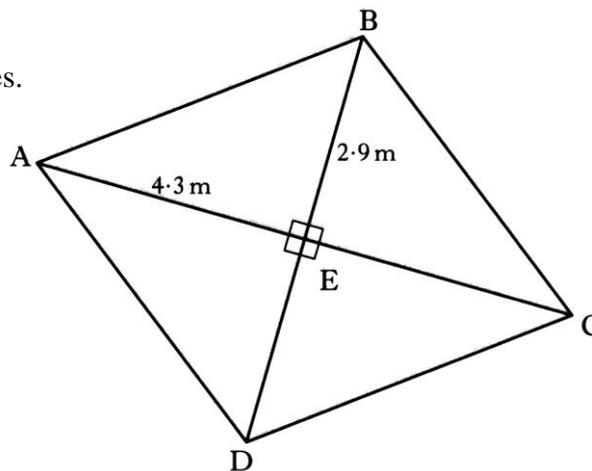   Brian takes the train which travels at an average speed of 60 kilometres per hour.

   What is the difference between their journey times?   **4**

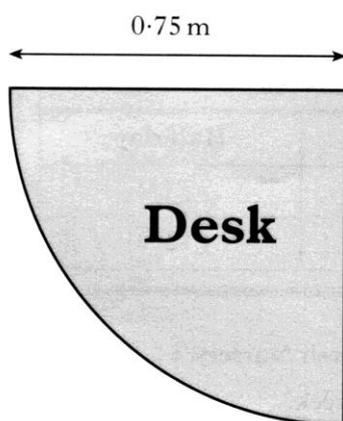|	KU	RE

8. ABCD is a rhombus.

   AE = 4.3 metres and BE = 2.9 metres.

   Calculate the perimeter
   of the rhombus.

   B

   2·9 m

   A

   4·3 m

   E

   C

   Do not use a scale drawing.   **4**

   D

9. The top of Calum's desk is in the shape of a quarter circle as shown.

   The measurement shown is in metres.

   0·75 m

   Desk

   a) Calculate the area of the top of the desk.   **2**

   b) Calum wants to paint the top of his desk.

   The tin of paint he buys has a coverage of 1 m^2.

   Using this tin of paint how many times could he paint the top of his desk ?   **2**

	KU	RE

10.   Maria is two years old.

Every week she goes to the nursery for 3 full days and 2 half days.

(*a*)

Playwell Nursery		
	Prices	
Age	**Full Day**	**Half Day**
0 – 2 years	£28	£15
3 – 5 years	£23.50	£12.50

Maria's mother pays for her to attend Playwell Nursery.

How much does Maria's mother pay each week?   **2**

On Monday, Tuesday and Wednesday Maria goes to nursery from 9am to 3pm.

On Thursday and Friday she goes from 9am to 12 noon.

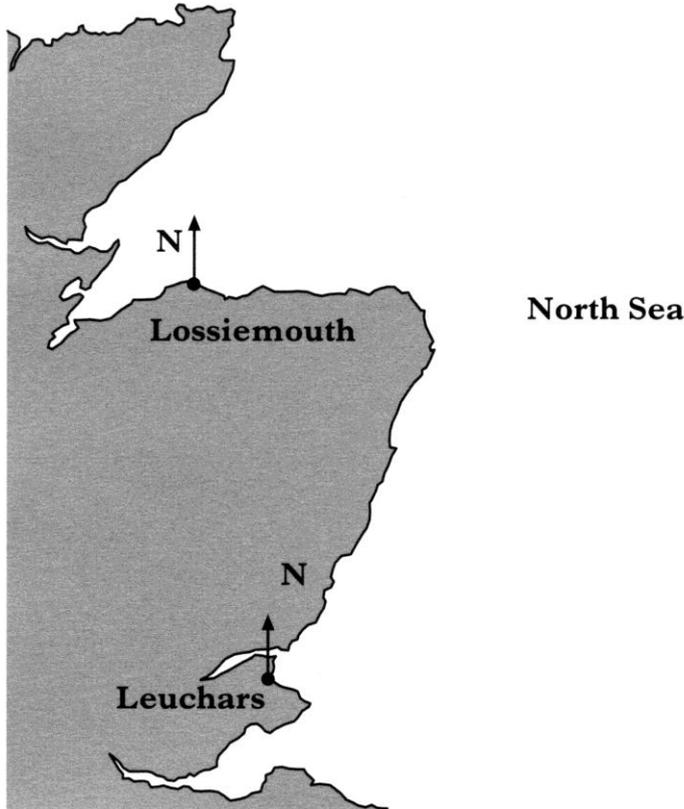(*b*)   The nursery introduces a new hourly rate.

New Rate   **£5 per hour**

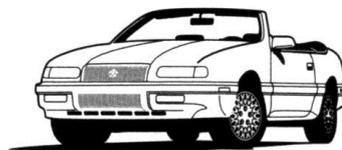Will Maria's mother save money when the nursery changes to the hourly rate?

Give a reason for your answer.   **3**

	KU	RE

	KU	RE

11.   The diagram below shows the positions of Lossiemouth and Leuchars.

A ship in the North Sea is on a bearing of 110° from Lossiemouth and 075° from Leuchars.

Show the position of the ship on the diagram below.

3

12.   Gordon is insuring his car with Carins Insurance.

The basic annual premium is £765.

As Gordon is a new customer his premium is calculated by taking $\frac{1}{5}$ off the basic annual premium.

However, because he wants to pay in monthly instalments, Carins Insurance add an extra 8% to his premium.

How much in total will Gordon pay per month ?

4

END OF QUESTION PAPER