Surname			Other	Names				
Centre Number				Candid	ate Number			
Candidate Signature								

General Certificate of Secondary Education November 2009

AQA

MATHEMATICS (MODULAR) (SPECIFICATION B) Module 1 Foundation Tier Section B

43051/FB

Friday 13 November 2009 2.05 pm to 2.35 pm

For this paper you must have:

· mathematical instruments.



You must not use a calculator.

Time allowed for Section B: 30 minutes

Instructions

- Use black ink or black ball-point pen. Draw diagrams in pencil.
- Fill in the boxes at the top of this page.
- Answer **all** questions.
- You must answer the questions in the spaces provided. Answers written in margins will not be marked.
- Do all rough work in this book.
- You may **not** use your calculator in Section B. Your calculator must remain on the floor under your seat.
- When you have answered Section B you may work again on Section A but you may **not** use your calculator. It must remain on the floor under your seat.
- At the end of the examination tag Section A and Section B together with Section A on top.

Information

- The maximum mark for Section B is 23.
- The marks for questions are shown in brackets.
- You may ask for more answer paper and graph paper. These must be tagged securely to this answer booklet.

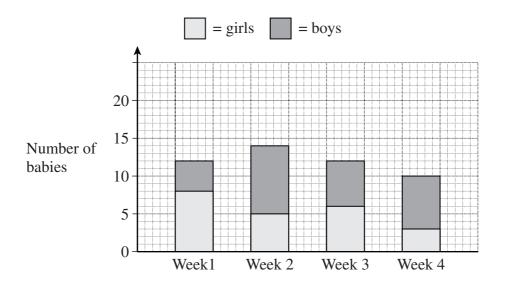
Advice

• In all calculations, show clearly how you work out your answer.



Answer all questions in the spaces provided.

6 The bar chart shows the number of babies born in a hospital over four weeks.



6 (a) How many girls were born in week 1?

Answer (1 mark)

6 (b) In which week were most babies born?

Answer (1 mark)

6 (c) In which week were the same number of girls and boys born?

Answer (1 mark)

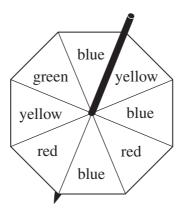
6 (d) How many boys were born in week 4?

Answer (1 mark)

(e) How many boys were born, in total, at this hospital during these four weeks?

6

7 An eight-sided spinner is labelled with colours.



The arrows on the scale show the probability of certain events occurring for this spinner.



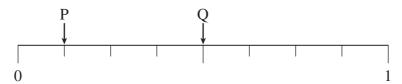
7 (a) Which letter shows the probability of the spinner landing on blue?

	/ 1 1 1
Answer	(1 mark)

Which letter shows the probability of the spinner landing on purple?

7 (c) Which letter shows the probability of the spinner landing on blue or yellow?

7 (d) P and Q are shown on this probability scale.



Describe an event, for this spinner, which is shown by

7 (d) (i) P

(1 mark)

7 (d) (ii) Q

(1 mark)

Turn over ▶



8 Ehab asks 18 pupils to choose their favourite vegetable from a list. These are his results.

peas	broccoli	peas	carrots	carrots	broccoli
peas	broccoli	sprouts	carrots	peas	carrots
carrots	peas	carrots	carrots	carrots	carrots

Ehab decides to draw a pie chart to show these results. The table shows some of his work.

Favourite vegetable	Tally	Frequency	Angle on pie chart
Broccoli (B)	111	3	60°
Peas (P)			
Carrots (C)			
Sprouts (S)			
		Total = 18	$Total = 360^{\circ}$

8 (a) Complete the tally and frequency columns in the	table
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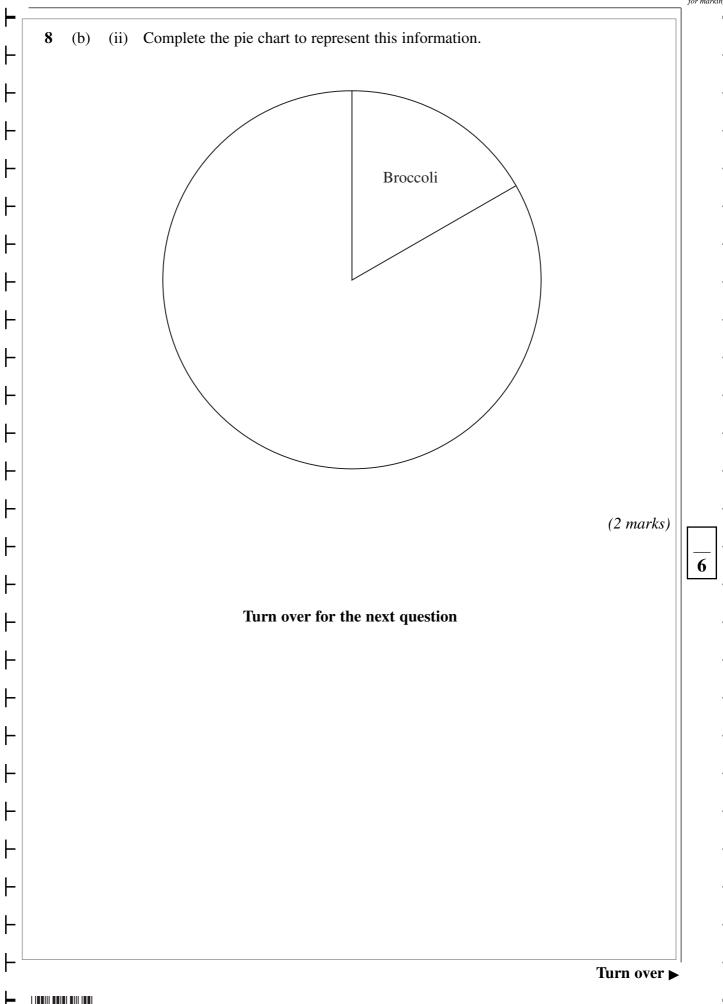
(2 marks)

			(2 marks)
8	(b)	(i)	Complete the angle on pie chart column in the table.



5

Areas outside the box will not be scanned for marking



9 The manager of a gym keeps a record of the number of people in the gym. The data is logged at the beginning of each hour one morning.

Time	Number of people in the gym
6 am	4
7 am	15
8 am	32
9 am	18
10 am	20
11 am	16

9 (a) 27 people entered the gym between 11 am and 12 noon. Nine people left the gym during this same time period.

		How many people were in the gym at 12 noon?
		Answer
9	(b)	Six people left the gym between 7 am and 8 am.
		How many people entered the gym between 7 am and 8 am?
		Δ nswer (2 marks)

- 10 Here are three statements.
 - A The amount of rainfall and the number of sunbeds hired on a beach
 - B The number of people living in a house and the size of the garden
 - C The age of a child and the height of a child

Here are three scatter diagrams:

Diagram 1

Diagram 2

××
×
_ ×
×××
×

Diagram 3



Match each scatter diagram to a statement.

Statement A Diagram

Statement B Diagram

Statement C Diagram

(2 marks)

END OF QUESTIONS



