Q1.	
	The table shows information about grocery items

	Small	Medium	Large
Bag of apples	-	- 495 grams 795 grams	
Tin of fish	195 grams	285 grams	-
Packet of nuts	37 grams	57 grams	87 grams

Use approximations to estimate the **total** amount these items weigh.

- 2 large bags of apples
- 1 small tin of fish

Q2.

2 medium packets of nuts

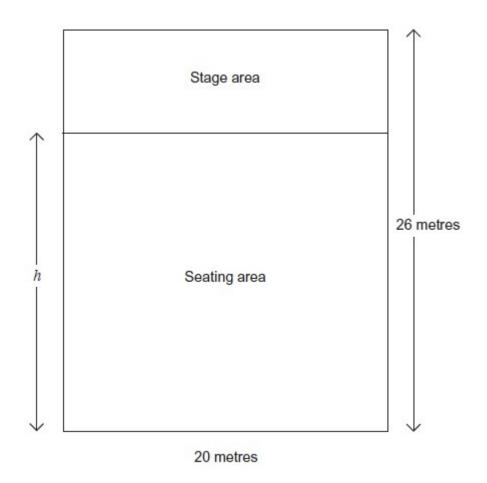
You must show your working.	
Answer grams	(Total 3 marks)
Use approximations to estimate the value of $\frac{3.92^2}{0.48}$	

Answer

(Total 2 marks)

Q3. The diagram shows a plan of a rectangular school hall.

Not drawn accurately



(a) The stage area is one-quarter of the area of the school hall.

Work out the length *h*

Answermetres

(3)

(b) In the seating area

Q4.

the maximum number of rows allowed is 13 the maximum number of seats allowed in a row is 16.

	There are the same number of seats in each row. Altogether there are 168 seats.	
	Work out the number of rows and the number of seats in each row.	
	You must show your working.	
	Number of rows	
	Number of seats in each row	
		(3 (Total 6 marks)
	3.21 + 4.89	
y	our calculator to work out 5.62 – 1.89 as a decimal.	
	Write down your full calculator display.	
	Answer	
	Allswei	(1)
	Write your answer to 1 decimal place.	

Answer	
	(1)
	(Total 2 marks)

Q5.Here is some information about tourism in 2012

Country Visited	Number of tourists (millions)	Total spent by (\$ millions)
France	83.0	126 200
USA	67.0	55 900
Spain	57.7	33 700

(a)	How many more tourists visited France than Spain?	
	Answer million	(2)
(b)	21% of the total spent by tourists in the USA was by Canadians. Work out the amount spent by Canadian tourists in the USA.	
	Answer \$ million	(2)

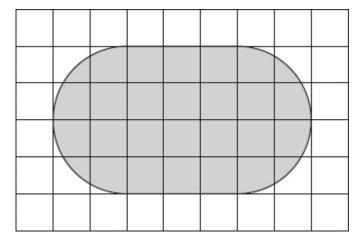
(c) In the UK the total spent by tourists was \$36 600 million. There were 29.3 million tourists.

Work out the average spent per tourist in the UK.

	Give	your	answer	to	the	nearest	\$10	
						•••••		
	••••••		••••••••••				•••••	
		Ansv	ver \$					(3)
							(Tot	al 7 marks)
Q6. Es	timate the va	lue of	98.7 ÷ 5					
		An	swer					
							(Tot	al 2 marks)
Q7. Us	se approximat	tions to esti	mate the value	e of 9.9	9 × 41			
		An	swer	•••••			<i>(</i>	
							(Tot	al 2 marks)
				20.02	2 × 0.49			
Q8. Us	se approximat	tions to esti	mate the value	e of 1	.99			
	••••••	•••••	•••••	•••••	••••••	•••••	•••••	
	•••••	•••••	•••••	•••••	• • • • • • • • • • • • • • • • • • • •	•••••	••••••	
		۸						

(Total 3 marks)

Q9. Jack drew this sketch of his lawn on squared paper. The length of each square represents 1 metre.



Work out an estimate for the area of his lawn.

Answer m2

(Total 3 marks)

Q10.You are given

2.2 pounds = 1 kilogram 1 kilogram = 1000 grams

	Matt	hew's grandm	$\frac{1}{1}$ nother asked him to buy $\frac{1}{2}$ pound of cherries.	
	Cher	ries are sold i	n 100 g, 250 g and 500 g packs. Which pack should he buy	to to
	_	he nearest an must show yo	ur working.	
			Answer g	(Total 4 marks)
Q11.	Work	out an approx	41×198/ ximate value of 77	
			Answer	 (Total 2 marks)
Q12.	(a)	Work out	√1.96 Answer	(1)
	(b)	Work out	10.6 – 7.45 2.5	

		Answer	(1
		(Total 2 r	1) narks
Q13.			
Ų _0.		e is some information about a football match.	
		City versus Rovers	
		Attendance 28 375	
	(a)	Write 28 375 to the nearest thousand.	
	()	Answer	
			(1)
	(b)	Write 28 375 to the nearest hundred.	
		Answer	
			(1)
	(c)	Molly goes to the match.	
		The match starts at 5.30 pm.	
		It finishes 1 hour 45 minutes later. It will take her 3 hours 30 minutes to travel home.	
		The TV highlights start at 10 pm.	
		Molly	
		Will Molly be home by 10 pm?	
		You must show your working.	

ne table shows the	cost of a short brea	k at a holiday park.	
Holiday starts in	Adult	1st and 2nd Child	3rd and 4th Child
June	£199 each	£39 each	FREE
July	£299 each	£49 each	£19 each
August 1r and Mrs Hyde and	£349 each	£59 each	£39 each
1r and Mrs Hyde and	d their three childre		starting on 28 July
1r and Mrs Hyde and	d their three childre	en want a short break	starting on 28 July
1r and Mrs Hyde and a) Use approxima You must show	d their three childre ations to estimate to v your working.	en want a short break the cost of this short b	starting on 28 July oreak.
Ar and Mrs Hyde and a) Use approxima You must show	d their three childre ations to estimate to w your working.	en want a short break the cost of this short b	starting on 28 July oreak.
1r and Mrs Hyde and a) Use approxima You must show	d their three childre ations to estimate to v your working.	en want a short break the cost of this short b	starting on 28 July oreak.
1r and Mrs Hyde and a) Use approxima You must show	d their three childre ations to estimate to v your working.	en want a short break the cost of this short b	starting on 28 July oreak.
1r and Mrs Hyde and a) Use approxima You must show	d their three childre ations to estimate to v your working.	en want a short break the cost of this short b	starting on 28 July oreak.
1r and Mrs Hyde and a) Use approxima You must show	d their three childre ations to estimate to v your working.	en want a short break the cost of this short b	starting on 28 July oreak.

AQA GCSE Maths - Approximation and Estimation

Answer £	(2 (Total 5 marks)
Q15. Estimate the value of 29.6 × 5.2	
Answer	(Total 2 marks)
Q16. Use approximations to estimate the value of $\frac{402.5}{2.19 \times 38.7}$	
Answer	

(Total 3 marks)

AQA GCSE Maths - Approximation and Estimation