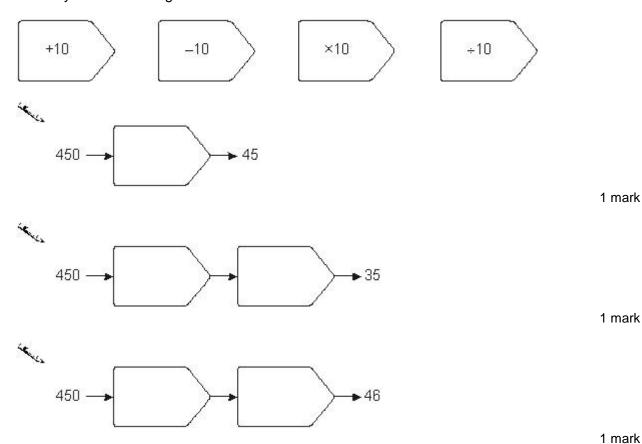
10 Question Challenge 4

Q1.

Fill in the boxes to complete each number chain.

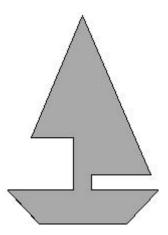
Use any of the following:



Q2.

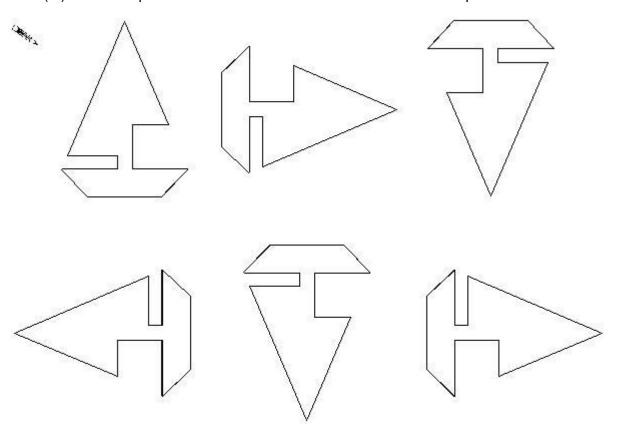
Samir has a piece of card that is grey on one side and white on the other.

He cuts out this shape from the card.



He turns over the shape so that the white side is showing.

Tick () all the shapes below that show the white side of Samir's shape.



2 marks

Q3. People pay to visit a garden.

Tickets:		
Age 16 and over	£3.60	
Under 16	£2.25	

145 people pay.

39 of them are under 16

How much ticket money is paid altogether?



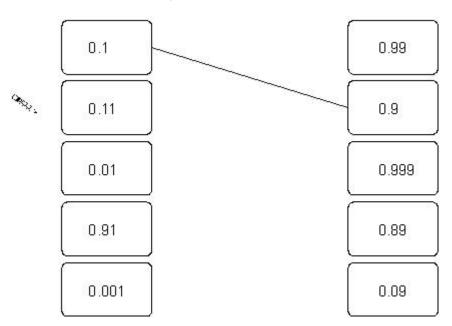
£

2 marks

Q4.

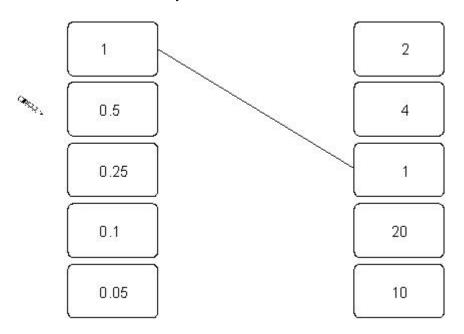
(a) Join all the pairs of numbers that ${\bf add}$ together to equal ${\bf 1}$

The first one is done for you.



2 marks

(b) Now join all the pairs of numbers that multiply to equal 1The first one is done for you.



2 marks

Q5. Adam is twice as old as Barry.

Charlie is 3 years younger than Barry.

The sum of all their ages is 53.

How old is Barry?

1 mark

Q6. (a) Write a number that is bigger than $5\overline{3}$ but smaller than 6



1 mark

(b) Now write a number that is bigger than 5.6 but smaller than $5\frac{2}{3}$



1 mark

In this question, n stands for any **whole number**. For the expression 2n, tick (\checkmark) the correct statement below. (a) **2***n* must be odd. **2***n* must be even. **2***n* could be odd or even. Explain your answer. 1 mark (b) For the expression 3n, tick (\checkmark) the correct statement below. **3***n* must be odd.

Explain your answer.

4

1 mark

3*n* must be even.

3*n* could be odd or even.

Q8.	Look at this	information.
~ 0.	LOOK at tillo	II II OI I I I I I I I I I I I I I I I

$$\frac{27}{40} = 0.675$$

$$\frac{29}{40} = 0.725$$

Use this information to write the missing decimals below.



1 mark



1 mark

Q9. The first square number is 1, and the sum of the first 20 square numbers is 2870

Work out the sum of the first 21 square numbers.



...... 2 marks

Q10. I am thinking of two numbers.

When I add my numbers, the answer is 1

When I multiply my numbers, the answer is 0.09

What are my numbers?

1 mark