Q1.

Jack says,

Explain why Jack is **not** correct.

Q2.

In the circles, write a multiple that belongs to each set.

One has been done for you.

2 marks

1 mark

Q3.

Here are six digit cards.

Use all six digit cards to make three multiples of 3

1 mark

Q4.

Here are five number cards.

Use each card **once** to make every statement below correct.

2 marks

Q5.

Here is a diagram for sorting numbers.

Write **one number** in each box.

One is done for you.

	multiple of 5	not a multiple of 5	
multiple of 3	30		
not a multiple of 3			

2 marks

Q6.

Write all the common multiples of 3 and 8 that are ${\it less than 50}$

1 mark

2 marks

1 mark

Q7.

The numbers in this sequence increase by the same amount each time.

Write the missing numbers.

Q8.

Chen uses these digit cards.

She makes a 2-digit number and a 1-digit number.

She multiplies them together.

Her answer is a multiple of 10

What could Chen's multiplication be?

Mark schemes

Q1.

Award **ONE** mark for an explanation that recognises that 32 is not a multiple of 3, e.g.

- 32 is not in the 3× table
- $32 \div 3 = 10 \text{ r} 2 \text{ or } 10.66 \text{ (which are not whole numbers)}$
- if you count in multiples of 3 from 0, you won't get 32
- 3+2=5, 5 is not a multiple of 3 so he is wrong.

For a description that includes one or both of the multiples of 3 either side of 32, e.g.

- if you do 10 x 3 = 30 and 11 x 3 = 33 there is no 32
- 10 × 3 = 30 and 32 is 2 away.

Do not accept responses that restate the question, e.g. Jack is not correct because if you multiply 3 by any whole number you will not get 32.

Do not accept vague or incomplete explanations, e.g.

- If you multiply by 3 you will get 30, not 32
- 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33
- 32 is not a factor of 3

Do not accept explanations which include incorrect mathematics or incorrect information relevant to the explanation.

Q2.

Award TWO marks for three rows completed correctly as shown:

If the answer is incorrect, award ONE mark for two rows correct.	Up to 2	
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Q3.

Three multiples of 3, eg:

OR

Multiples may be given in any order. Digits may be in either order, eg 24 **OR** 42 **Do not** accept digits used more than once. **Do not** accept digits other than those shown. U1

[1]

[1]

[2]

Q4.

Award **TWO** marks for the correct answer as shown:

If the answer is incorrect, award **ONE** mark for 4 true statements with no number repeated (within those 4), eg:

Do not accept numbers other than those given. (Multiple of 3 can be 48 **OR** 51) (Multiple of 4 can be 48 **OR** 52)

Up to 2 U1

Q5.

Award TWO marks for three boxes completed correctly, e.g:

	multiple of 5	not a multiple of 5	
multiple of 3	30	3, 6, 9 etc	
not a multiple of 3	5, 10, 20 etc	1, 2, 4, 7 etc	

If the answer is incorrect, award **ONE** mark for at least two boxes completed correctly. *Accept more than one correct multiple in any box.* **Do not** accept any box containing a correct multiple and an incorrect number.

Up to 2

Up to 2m

[2]

[1]

Q6.

24 AND 48 only

Numbers may be given in either order.

Q7.

Award TWO marks for three correct numbers, as shown:

35	42	49	56	63	70

Award **ONE** mark for two numbers correctly placed.

Q8.

 95×6 **OR** 96×5

[1]

[2]