**Consolidation work 2020**

**Q1.**

Here is part of a number line.

Write the missing numbers in the boxes.



2 marks

**Q2.**

Here is part of a number line.



What is the value of **X**?



1 mark

What is the value of **Y**?



1 mark

**Q3.**

Here is part of a temperature scale.



What is the temperature shown at **A**?



1 mark

What temperature is 20 degrees **higher** than **A**?



1 mark

**Q4.**

Here is part of a number line.

It is divided into equal sections.



Write the letter of the section where each of these numbers belongs.

The number 99 has been done for you.

|  |  |  |
| --- | --- | --- |
|   | number | section |
|   | 99 | J |
|   | 29 |   |
|   | –83 |   |
|   | –15 |   |
|   | 44 |   |

2 marks

**Q5.**

Circle **two** numbers with a **difference** of **8**

–5     –4     –3     –2     –1     0     1     2     3     4     5

1 mark

Write **two** numbers with a **sum** of **–6**

****

1 mark

**Q6.**

Here is a table of temperatures at dawn on the same day.



What is the **difference** in temperature between **London** and **Paris**?



1 mark

At noon the temperature in **New York** has **risen by 5°C.**

What is the temperature in **New York** at noon?



1 mark

**Q7.**

I am thinking of a number that is not zero.

I **multiply** my number by **5**

Tick (✔) the statement below that is true.

|  |  |  |
| --- | --- | --- |
|   |   | The answer must be positive. |
|   |   | The answer must be negative. |
|   |   | The answer could be positive or negative. |

Explain how you know.



1 mark

**Q8.**

Carol has a rule for a sequence of numbers.

Her rule is

***"The next number is the sum of the two previous numbers."***

Use Carol’s rule to write in the three missing numbers.



1 mark

**Q9.**

Paulo makes a sequence of numbers.

He chooses a starting number and then subtracts equal amounts each time.

The **third number** in his sequence is **45**

The **tenth number** is **–32**



What is the **first** number in the sequence?



2 marks

**M1.**Award **TWO** marks for both numbers correct as shown.



If the answer is incorrect, award **ONE** mark for one number correct.

***Do not*** *accept 12−*

*Accept +2 in the right-hand box.*

**Up to 2**

**[2]**

**M2.**(a)     **X** = 125

**1**

(b)     **Y** = -75

***Do not*** *accept 75−*

**1**

**[2]**

**M3.**(a)     −7°C

***Do not*** accept 7−

**1**

(b)     13°C

*If (a) is negative allow follow through in part (b)
for* ***ONE*** *mark.*

**1**

**[2]**

**M4.**          Award **TWO** marks for all four letters in the correct order as shown:

*99    J*

  29    **G**

*–83*    **A**

–15    **E**

  44    **H**

If the answer is incorrect, award **ONE** mark for three letters correct.

**Up to 2**

**[2]**

**M5.**          (a)     Circling of numbers

       –5 **AND** 3

**OR** –4 **AND** 4

**OR** –3 **AND** 5

*Only these numbers are acceptable. Accept other unambiguous
indications of these numbers.*

**1**

(b)     Any two numbers which sum to –6, eg

       –5 **AND** –1

**OR** –7 **AND** 1

*The numbers need not be from the set given in the question.
Accept –6* ***AND*** *0* ***OR*** *–3* ***AND*** *–3. Accept fractions
and decimals.*

**1**

**[2]**

**M6.**          (a)     10

*Accept +10* ***OR*** *–10*

***Do not*** *accept an incomplete calculation, eg:* ***4 + 6***

**1**

(b)     –4

*Accept ‘negative 4’* ***OR*** *‘minus 4’* ***OR*** *‘4 below’.*

***Do not*** *accept ‘4–’.*

**1**

**[2]**

**M7.**         Indicates the answer could be positive or negative and gives a correct explanation

eg

•      A positive multiplied by −5 gives a negative answer, but a negative multiplied by −5 gives a positive answer

•      Positive numbers will become negative, negative numbers will become positive

•      If the number is 10 the answer will be –50, which is negative, but if the number is −10, the answer is 50, ie positive

*Accept minimally acceptable explanation eg •      10 becomes negative, but −10 becomes positive •      +ve → –ve        –ve → +ve •     −5 × −3 = 15, −5 × 3 = −15*

***Do not accept*** *incomplete explanation eg •      –5 × 3 = −15 •      The original number could be positive or negative so the answer could be positive or negative*

*! Makes an incorrect decision, or no decision made, but explanation clearly correct Condone provided the explanation is more than minimal*

**U1**

**[1]**

**M8.**                 *‘+’ signs may be omitted.*

**[1]**

**M9.**          Award **TWO** marks for the correct answer of 67

If the answer is incorrect, award **ONE** mark for evidence of an appropriate method, eg

          7 gaps = 77

1 gap = 11

*Answer need not be obtained for the award of the mark.*

**Up to 2**

**[2]**