

## Q1. (2017)

|   |           |    |  |
|---|-----------|----|--|
| 4 | $-4 < -3$ | B1 |  |
|---|-----------|----|--|

## Q2. (2019)

|    |                                                                                                                 |    |                                                                                                                                                                                                                                                               |
|----|-----------------------------------------------------------------------------------------------------------------|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 24 | -1 0 1 2                                                                                                        | B3 | <p>B2 three correct values with no incorrect values</p> <p>or</p> <p>-3 -2 -1 0 1 2 and -1 0 1 2 3 4 5</p> <p>or</p> <p>interval that contains only the integers<br/>-1 0 1 2</p> <p>B1 -3 -2 -1 0 1 2</p> <p>or -1 0 1 2 3 4 5</p> <p>SC2 answer 2 3 4 5</p> |
|    | <b>Additional Guidance</b>                                                                                      |    |                                                                                                                                                                                                                                                               |
|    | Examples of intervals that contain only the integers -1 0 1 2<br>-1 ≤ x ≤ 2 or [-1, 2] or -2 < x < 3 or (-2, 3) |    |                                                                                                                                                                                                                                                               |
|    | -1 0 1 2 3 4 5 may be shown as an interval that contains only these integers eg -1 ≤ x < 6 or [-1, 6)           |    |                                                                                                                                                                                                                                                               |
|    | Intervals can be shown on a number line                                                                         |    |                                                                                                                                                                                                                                                               |
|    | -3 -2 -1 0 1 2 can <b>not</b> be shown as an interval or on a number line                                       |    |                                                                                                                                                                                                                                                               |
|    | Lists may be in any order eg 1 2 3 4 5 -1 0                                                                     |    | B1                                                                                                                                                                                                                                                            |
|    | Condone repeats in lists eg -1 0 1 1 2                                                                          |    | B3                                                                                                                                                                                                                                                            |
|    | Ignore commas/and/or between numbers in lists                                                                   |    |                                                                                                                                                                                                                                                               |
|    | -3 -2 -1 0 1 2 3 4 5 with no other valid working                                                                |    | B0                                                                                                                                                                                                                                                            |

## Q3. (2020)

| Q     | Answer                                              | Mark | Comments                                               |
|-------|-----------------------------------------------------|------|--------------------------------------------------------|
| 20(a) | $(24 + 8 =) 32$                                     | B2   | B1 $(2a =) 2 \times 12$ or $(2a =) 24$<br>or $(b =) 8$ |
|       | <b>Additional Guidance</b>                          |      |                                                        |
|       | 32 with no incorrect working                        |      | B2                                                     |
|       | 32 from incorrect working eg $22 + 10 = 32$         |      | B0                                                     |
|       | $24 + 9 = 33$                                       |      | B1                                                     |
|       | $22 + 8 = 30$                                       |      | B1                                                     |
|       | $24a$ without a B1 response                         |      | B0                                                     |
|       | $8b$ without a B1 response                          |      | B0                                                     |
|       | $24a + 8b$ without a B1 response                    |      | B0                                                     |
|       | Use of inequalities in answer without a B1 response |      | B0                                                     |

## Q4. (2020)

| Q     | Answer                                                                                      | Mark | Comments                                                                                      |
|-------|---------------------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------------------|
| 20(b) | An example where $x$ and $y$ are both negative and $\frac{y}{x} = 4$                        | B1   | eg $x = -1$ and $y = -4$<br>values of $x$ and $y$ can be implied<br>eg $\frac{-12}{-3} (= 4)$ |
|       | <b>Additional Guidance</b>                                                                  |      |                                                                                               |
|       | Correct use of $\div$ instead of fractions is allowed eg $-12 \div -3$                      |      | B1                                                                                            |
|       | Must show the fraction or division or state which is $x$ and which is $y$<br>eg -1 and -4   |      | B0                                                                                            |
|       | Decimals and / or fractions may be used eg $\frac{-6.4}{-1.6}$ or $\frac{-2}{-\frac{1}{2}}$ |      | B1                                                                                            |
|       | One correct example among several attempts                                                  |      | B1                                                                                            |

## Q5. (2021)

| Q  | Answer                                                                                                | Mark | Comments    |
|----|-------------------------------------------------------------------------------------------------------|------|-------------|
| 28 | Sometimes true<br>Always true<br>Always true<br>Never true                                            | B4   | B1 for each |
|    | Additional Guidance                                                                                   |      |             |
|    | Allow any unambiguous indication<br>eg all 4 correct boxes contain a cross with all other boxes blank |      | B4          |
|    | A row with one tick and some crosses – mark the tick                                                  |      |             |
|    | A row with more than one tick is B0 for that row                                                      |      |             |
|    | Mark the boxes not the working lines                                                                  |      |             |

## Q6. (2022)

(A)

| Q     | Answer                                                                                                                                                                   | Mark | Comments                         |
|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------------------------------|
| 12(a) | 36 or 29 or 92                                                                                                                                                           | B1   | condone 6.3 or 3.6 or 2.9 or 9.2 |
|       | <b>Additional Guidance</b>                                                                                                                                               |      |                                  |
|       | Condone eg multiplication signs or 'by' or commas or 'and'<br>eg $3 \times 6$ or $2 \times 9$ or 9 by 2<br>or 3, 6 or 2, 9 or (9, 2)<br>or 3 and 6 or 2 and 9 or 9 and 2 |      | B1<br>B1<br>B1                   |
|       | Only $6 \times 3$ or 6 by 3 or 6, 3 or (6, 3) or 6 and 3                                                                                                                 |      | B0                               |
|       | Any evaluation included in the answer must be correct                                                                                                                    |      |                                  |
|       | More than one correct answer eg 36 and 92                                                                                                                                |      | B1                               |
|       | Allow inclusion of 63 eg 36 and 63                                                                                                                                       |      | B1                               |
|       | Inclusion of an incorrect answer eg 36 and 24                                                                                                                            |      | B0                               |

(B)

| Q     | Answer                                                                                                                                                                   | Mark | Comments                                                                      |
|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-------------------------------------------------------------------------------|
| 12(b) | Any 2-digit number with at least one digit of 0                                                                                                                          | B1   | eg 50 or –50<br>condone eg 7.0 or 0.2 or 0.0<br>condone eg 00 or 01 or 02 etc |
|       | <b>Additional Guidance</b>                                                                                                                                               |      |                                                                               |
|       | Condone eg multiplication signs or 'by' or commas or 'and'<br>eg $5 \times 0$ or 0 by 5 or $0 \times 0$<br>or 1, 0 or (0, 1) or 0, 0<br>or 2 and 0 or 0 and 2 or 0 and 0 |      | B1<br>B1<br>B1                                                                |
|       | Any evaluation included in the answer must be correct                                                                                                                    |      |                                                                               |
|       | More than one correct answer eg 20 and 30                                                                                                                                |      | B1                                                                            |
|       | Inclusion of an incorrect answer eg 20 and 21                                                                                                                            |      | B0                                                                            |

(C)

| Q     | Answer                                                                                                                                                                   | Mark | Comments                  |
|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|---------------------------|
| 12(c) | 89 or 98 or 99                                                                                                                                                           | B1   | condone 8.9 or 9.8 or 9.9 |
|       | <b>Additional Guidance</b>                                                                                                                                               |      |                           |
|       | Condone eg multiplication signs or 'by' or commas or 'and'<br>eg 8 by 9 or $9 \times 8$ or $9 \times 9$<br>or (8, 9) or 9, 8 or 9, 9<br>or 8 and 9 or 9 and 8 or 9 and 9 |      | B1<br>B1<br>B1            |
|       | Any evaluation included in the answer must be correct                                                                                                                    |      |                           |
|       | More than one correct answer eg 89 and 98                                                                                                                                |      | B1                        |
|       | Inclusion of an incorrect answer eg 89 and 91                                                                                                                            |      | B0                        |

## Q7. (2023)

| Q    | Answer                                                                                                                                | Mark                                  | Comments                                                                                                                                                                                                                                                                                                    |
|------|---------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 7(a) | Two even and two odd numbers<br>and<br>the numbers all different<br>and<br>the sum of the four numbers is 46                          | B2                                    | any order<br>B1 two even and two odd numbers<br>and<br>the sum of the four numbers is 46<br><br>or<br>the numbers all different<br>and<br>the sum of the four numbers is 46<br><br>or<br>two even and two odd numbers<br>and<br>the numbers all different<br>and<br>the sum of the four numbers is [36, 56] |
|      | <b>Additional Guidance</b>                                                                                                            |                                       |                                                                                                                                                                                                                                                                                                             |
|      | <input type="text" value="11"/> + <input type="text" value="8"/> + <input type="text" value="6"/> + <input type="text" value="21"/>   |                                       | B2                                                                                                                                                                                                                                                                                                          |
|      | <input type="text" value="30"/> + <input type="text" value="10"/> + <input type="text" value="3"/> + <input type="text" value="3"/>   | (not all different)                   | B1                                                                                                                                                                                                                                                                                                          |
|      | <input type="text" value="8"/> + <input type="text" value="12"/> + <input type="text" value="10"/> + <input type="text" value="16"/>  | (no odds)                             | B1                                                                                                                                                                                                                                                                                                          |
|      | <input type="text" value="10"/> + <input type="text" value="16"/> + <input type="text" value="1"/> + <input type="text" value="11"/>  | (not 46 but in range)                 | B1                                                                                                                                                                                                                                                                                                          |
|      | <input type="text" value="15"/> + <input type="text" value="10"/> + <input type="text" value="15"/> + <input type="text" value="10"/> | (not all different <b>and</b> not 46) | B0                                                                                                                                                                                                                                                                                                          |
|      | <input type="text" value="3"/> + <input type="text" value="5"/> + <input type="text" value="7"/> + <input type="text" value="29"/>    | (no evens <b>and</b> not 46)          | B0                                                                                                                                                                                                                                                                                                          |
|      | Negatives are acceptable for B1 or B2                                                                                                 |                                       |                                                                                                                                                                                                                                                                                                             |
|      | 0 is an even number for B1 or B2, but a blank box does not imply 0                                                                    |                                       |                                                                                                                                                                                                                                                                                                             |
|      | Fractions and/or decimals are acceptable for four different numbers that sum to 46 for B1                                             |                                       |                                                                                                                                                                                                                                                                                                             |
|      | Mark the boxes                                                                                                                        |                                       |                                                                                                                                                                                                                                                                                                             |