YEAR 7 TEST 1 ASSESSMENT HOMEWORK –

CALCULATOR NOT ALLOWED Foundation

NAME \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ TEACHER \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| Negative Numbers | /10 | Algebraic Manipulation | /10 | Averages | /10 | Number properties | /10 |

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| --- | --- | --- | --- | --- |
|  | **Negative Numbers** | |  | |
| **1.**  **S** | a) Circle the smallest number:   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | -3 | 4 | -13 | 9 | 1 | -5 | | | **(1)** | |
| **2.**  **S** | Fill in the missing numbers on these scales   |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | -13 |  | -5 | -1 |  | 7 |  | 15 | 19 |  | 27 | | | **(4)** | |
|  |  | |  | |
|  |
| **3.**  **S** | Put the correct inequality sign in the box. Choose from > <   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | |  | 2 |  | | -5 |  |  | |  |  |  |  | |  | |  |  |  | | |  |  |  | | |  |  |  | | | | **(1)** | |
| **4.**  **F** | Write down the following numbers in order from **smallest** to **largest**: **–**6 7 **–**1 9 **–**8 | | **(1)** | |
|  |  | |  | |
| **5.**  **M** | Calculate  a) 3 – 9 = ……………… c) -2 – 4 = …………………..  b) -5 + 3 = ……………… | | **(3)** | |
|  | **TOTAL** | | **(10)** | |
|  |  | |  | |
|  |  | |  | |
|  | **Algebraic Manipulation** | |  | |
| **1.**  **S** | Simplify the following  a) n + n + n …………………………  b) 3*a* + 6*c* + 2*a* + 2*c* …………………………  c) 8d – 6d…………………………  d) a x 4b ……………………… | | **(4)** | |
|  |  | |  | |
| **2.**  **F** | Write down the algebraic expression for:  a) 3 more than a …………………………  b) 4 less than b …………………………  c) double x …………………………  d) half of h ………………………… | | **(4)** | |
|  |  | |  | |
|  |  | |  | |
| **3.**  **M** | The perimeter of this shape is 3a + 2b.  a  a  a  b  b  **p = 3a + 2b**  Write an expression for the perimeters of each of these shapes.  5e  5e  2f  4f  b  b  b  …………………………………………… …………………………………………… | | **(2)** | |
|  |  | |  | |
|  |  | |  | |
|  | **TOTAL** | | **(10)** | |
|  |  | |  | |
|  |  | |  | |
|  | **Averages** | |  | |
| **1.**  **S** | Which letter is the **mode**?  M A T H S I S S U P E R  ………………………… | | **(1)** | |
| **2.**  **S** | Here are some number cards :   |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | **1** |  | **3** |  | **3** |  | **5** |  | **13** |   Find:  a)The **mode**. ……………………  b) The **median**. ……………………  c)The **mean**. ……………………  d) The **smallest** …………………  e) The **largest** …………………  f) The **range** …………………… | | **(6)** | |
|  |  | |  | |
| **3.M** | The table shows the midnight temperature on each day for eight days.   |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Day | M | T | W | T | F | S | S | M | | Temperature (°C) | -7 | -8 | 1 | 0 | -4 | 3 | 4 | -1 |   a) Work out the **range** of temperatures. ………………………°C  b) Find the **modal** temperature. ………………………°C  c) Find the **median** temperature.    ………………………°C  **TOTAL** | | **(1)**  **(1)**  **(1)**  **(10)** | |
|  | **Number Properties** | |  | | |
| **1.**  **S** | Circle the multiples of 10.   |  |  |  |  |  | | --- | --- | --- | --- | --- | | 20 | 32 | 80 | 6.0 | 140 |   Circle the multiples of 5.   |  |  |  |  |  | | --- | --- | --- | --- | --- | | 46 | 35 | 145 | 230 | 31 | | | **(2)** | | |
| **2.**  **F** | Sort the numbers below into the correct section.  **3, 9, 12, 15, 20, 21, 22**  **Multiples of 3 Even Numbers** | | **(3)** | | |
|  | |  | |
|  | |  | |
|  | |  | |
| **6.**  **M** | Write down all the **factors** of 10  ……………………………………………………………………………………………………………………………………………………  Write down all the **factors** of 18  ……………………………………………………………………………………………………………………………………………………  Write down the **highest common factor** ( HCF) of 10 and 18 ……………… | | **(2)**  **(2)**    **(1)** | | |
|  | **TOTAL** | | **(10)** | | |