YR 9 HOMEWORK ASSESSMENT TEST 2 CALCULATOR ALLOWED Core

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

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| Perimeter and Area | /10 | Ratio and Proportion | /10 | Sequences | /10 |

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|  | **Perimeter and Area** |  |
| **1.**  **S** | Find the **perimeter** of this shape:  12.4 cm  92 mm  35 mm    Perimeter = ……………………………… cm | **(2)** |
| **2.** | Find the **area** of these shapes. Some lengths will not be needed. |  |
| **S** | 35mm  8cm  4cm  Area = …………………………… cm² | **(1)** |
| **F** | 13.5 cm  70mm  12cm  Area = …………………………… cm² | **(2)** |
| **3**.  **F** | Find the **total area** of this shape.  6 m  1.5 m  250 cm  350 cm  Area = …………………………… m² | **(3)** |
| **4.**  **F** | Find the area of this **trapezium**. 14 cm  14 cm  6 cm  13 cm  Area = ………………………… cm² | **(2)** |
|  | **TOTAL** | **(10)** |
|  | **Ratio and Proportion** |  |
| **1.**  **S** | Write the ratio 16 : 30 in its **simplest** form.  ………………………… | **(2)** |
| **2.**  **F** | A pile of sand has a weight of **72 kg**.  The sand is put into a small bag, a medium bag and a large bag in the  ratio 2 : 3 : 7  Work out the weight of sand in **each bag**.        small bag …………… kg medium bag …………… kg large bag …………… kg | **(3)** |
| **3.**  **F** | The cost of 6 cups is £9.60 Work out the cost of **10** of these cups.  ………………………… | **(2)** |
| **4.**  **M** | Here are the ingredients needed to make **16 shortcakes**.   |  |  | | --- | --- | | Liz makes some shortcakes. | **Shortcake** | | She uses **25 ml of milk**. | **Makes 16 slices** | |  |  | | How **many** shortcakes does Liz make? | 50g sugar | |  | 200g butter | |  | 200g flour | |  | 20 ml of milk |   ………………………… | **(3)** |
|  | **TOTAL** | **(10)** |
|  | **Sequences** |  |
| **1.**  **S** | Find the **missing terms** in these sequences:  a) 1.4 1.1 0.8 \_\_\_\_\_\_\_ \_\_\_\_\_\_\_  b) 1 4 16 \_\_\_\_\_\_\_  c) 1 2 3 5 \_\_\_\_\_\_\_ \_\_\_\_\_\_\_ | **(3)** |
| **2.**  **F** | a) Find the rule for the **nth term** for this sequence: 3, 7, 11, 15, ……  ……………………  b) Calculate the **20th term** in this sequence  ……………………  c) Jodie says “ 134 is in this sequence”  Is Jodie correct?  You must **explain** your answer.  ………………………………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………………………… | **(2)**  **(1)**  **(1)** |
| **3.**  **F** | Complete the **next three terms** of the sequence whose general rule is:  nth term = 5*n* + 2  7 , ……… , ……… , ……… s) | **(1)** |
| **4.**  **F** | Find the **nth term** for this sequence: 50, 48, 46, 44, 42, ……  …………………… | **(2)** |
|  | **TOTAL** | **(10)** |