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 cm92 mm35 mm  Perimeter = ……………………………… cm |  **(2)** |
| **2.** | Find the **area** of these shapes. Some lengths will not be needed. |  |
| **S** | 35mm8cm4cmArea = …………………………… cm² | **(1)** |
| **F** | 13.5 cm70mm12cmArea = …………………………… cm² | **(2)** |
| **3**.**F** | Find the **total area** of this shape.6 m1.5 m250 cm350 cmArea = …………………………… m² | **(3)** |
| **4.****F** | Find the area of this **trapezium**.14 cm14 cm6 cm13 cmArea = ………………………… 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 : 7Work 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 £9.60Work 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)** |