**Monday 13th June 2022 – Class 5 Homework – Bamburgh Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Q1.**

         *x* + 2*y* = 20

*x* and *y* are whole numbers **less than 10**

What could ***x*** and ***y*** be?

|  |  |
| --- | --- |
| *x* =  |  |
| *y* =  |  |

1 mark

**Q2.**

Amina is making designs with two different shapes.

She gives each shape a value.



Total value is 147          Total value is 111

Calculate the value of each shape.



1 mark



1 mark

**Q3.**

A shop prints designs on T-shirts.



They use this formula to work out the price for printing a design.

|  |
| --- |
| **price = 60p × number of colours + £1.25** |

What is the price for printing a design that has **3** colours in it?



1 mark

Amina has **£5** to spend on printing a design.

What is the greatest number of **colours** she can have in the design?

2 marks

**Q4.**

In this diagram, the shaded rectangles are all of equal width (***w***).



Calculate the width (***w***) of one shaded rectangle.

2 marks

**Q5.**

Here is a pattern of number pairs.

|  |  |
| --- | --- |
| *a* | *b* |
| 1 | 9 |
| 2 | 19 |
| 3 | 29 |
| 4 | 39 |

Complete the **rule** for the number pattern.



1 mark

**Q6.**

***n*** = 22

What is 2***n*** + 9?



1 mark

2***q*** + 4 = 100

Work out the value of ***q***.



1 mark

**Q7.**

Here is an equation.

*k* = 100 − 4*n*

(a)     Find the value of *k* when *n* = 60



1 mark

(b)     Find the value of *n* when *k* = 99



1 mark

**Q8.**

***n***stands for a whole number.

**2*n*** is greater than 30
**5*n*** is less than 100

Write **all** the numbers that ***n*** stands for.