2015 Year 7 Number Test

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 56 marks

1. Write 3529 using expanded notation.

 [1]

1. Using the number 5462
2. Write the number in words [1]

1. Give the place value of the 6 digit \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ [1]
2. What is the value of the 4 digit? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ [1]
3. Write three thousand four hundred and seventy two in numeral form.

 [1]

1. Write $2000+300+50+8 $as a simple (basic) numeral.

 [1]

1. Show full working for the following questions
(marks will only be awarded if correct working is shown).

|  |  |
| --- | --- |
| 1. $16+23+32+5=$

[1] | 1. $288÷6=$

[2] |
| 1. $16×9=$

[1] | 1. $23×42=$

[2] |
| 1. $134-48=$

[1] | 1. $5+6×3-2=$

[1] |
| 1. $\left(3+7\right)×\left(5-2\right)+6=$

[1] | 1. $31038÷9=$

[2] |

1. Show full working for the following questions
(marks will only be awarded if correct working is shown).

|  |  |
| --- | --- |
| 1. Find the sum of 11 and 82

[2] | 1. Calculate the difference between 63 and 21

[2] |
| 1. What is the product 15 and 3?

[2] |  |

1. List the first 3 square numbers \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ [1]
2. What is the opposite operation of multiplication? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ [1]
3. a) Write $4×4×4×4$ in index form. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ [1]
4. Give $2×2×2+3×3$ in index form and as a basic numeral

 Index form\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_[2]

 Basic numeral\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_[1]

1. List all of the factors of 24. [2]

1. a) Give the first 4 multiples of 3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ [1]
2. Find the lowest common multiple of 8 and 6.

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ [2]

1. Find the highest common factor of 12 and 18.

 [2]

1. Give the first 3 prime numbers \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ [1]
2. Rewrite as a basic numeral:

$3×10^{3}$

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ [1]

1. Using leading figure estimation, approximate the answers to the following problems
(correct working must be shown):

|  |  |  |
| --- | --- | --- |
| 1. $38+43+24=$

[2] | 1. $26×12=$

[2] | 1. $78-16=$

[2] |
| 1. $8×17=$

[2] | 1. $42÷11=$

[2] |  |

1. a) Draw the prime factor tree for 36 [2]

b) Write 24 as a product of prime factors.

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ [1]

1. Complete the sentence $4×\left(3+8\right)=4×3+4\_{-}\\_\\_\\_\\_\\_\\_\\_\\_\\_\\_\\_\\_\\_\\_\\_\\_\\_\\_\\_\\_$[1]
2. Use the **distributive property** to evaluate the problems
(show full working and your use of the distributive property):
3. $8×6+2×6=$

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ [2]

1. $70×12-60×12=$

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ [2]