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| Year  7 | Mathematics Practice Test – Indices and Number Systems | **Non Calculator Practice Test** |
|  | Name |  |

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| 1. | What is the place value of the 5 digit in the number 15 234?  five hundred five thousand fifty fifty thousand |
| 2. | Rewrite the list of numbers in the boxes provided, in ascending order.  1 023, 231, 2 301, 132, 1 230 |
| 3. | Write the numeral for the number:  “Two hundred and thirty five thousand, eight hundred and sixteen” |
| 4. | Write the single numeral for the number which is written in expanded notation as: |
| 5. | The crowd at two football matches were counted to be 78 823 and 4 980. The newspaper rounded them to the nearest hundred. What did the newspaper report the crowds to be?  78 800 and 4 900 78 800 and 5 000 78 900 and 4 900 78 900 and 5 000 |
| 6. | A newspaper article describes a company’s annual profit as being $560K.  This amount is the same as:  $560 000 $56 000 $5 600 $560 |
| 7. | Complete the sentence by using a number between 0 and 10:  A prime number has exactly factors. |
| 8. | Which pair of numbers below has one prime number and one composite number?  2 and 3 8 and 9 1 and 2 3 and 4 |
| 9. | The number 30 can be written as a product of its prime factors as: |
| 10. | Complete the boxes to write the product below in index notation. |
| 11. | Which is correct? |
| 12. | Which of the following is **not** true? |
| 13. | Complete the following giving the final value of the calculation: |
| 14. | Complete the boxes to write the number below in expanded notation using indices. |
| 15. | Which of the following is correct?  20 is a factor of 5 and a multiple of 100  20 is a multiple of 5 and a multiple of 100  20 is a factor of 5 and a factor of 100  20 is a multiple of 5 and a factor of 100 |
| 16. | Write all of the factors of 24. |
| 17. | Write the first 5 multiples of 12. |
| 18. | Two prime numbers that differ by two are called twin primes. For example, 3 and 5 are twin primes, but 7 and 11 are not because they differ by four.  Write down another pair of twin primes.  and |
| 19. | 360    20 x 18  5 x 4 x 9 x 2  5 x 2 x 2 x 3 x 3 x 2  Using the factor tree above complete the prime factorisation of 360 below. |
| 20. | Which is true?  315 is divisible by 3 and by 5.  315 is divisible by 3 but not by 5.  315 is divisible by 5 but not by 3.  315 is not divisible by 3 nor by 5. |
| 21. | Complete the following using the words **odd** and/or **even.**  The sum of two even numbers is always  and the sum of two odd numbers is always . |
| 22. | Complete line 7 of the pattern below.  Line 1 12 = 1  Line 2 22 = 1 + 3  Line 3 32 = 1 + 3 + 5  Line 4 42 = 1 + 3 + 5 + 7  .........  .........  Line 7 72 = 1 + 3 + 5 + 7 + |
| 23. | Complete the missing numbers in Pascals Triangle below.  1  1 1  1 2 1  1 3 3 1  1 4 6 4 1  1 1 |
| 24. | The number represented by the Roman numerals below is :  MMMXCII  3112 3902 3092 3042 |
| 25. | Write 267 using Roman numerals. |
| 26. | Write one of the symbols > , < or = in the box to correctly complete the sentence below. |
| 27. | Which of the following statements is true?  Statement A Statement B    Statement A only is true.  Statement B only is true.  Both statements are true.  Neither statement is true. |
| 28. | 30 ÷ 3 × 5 × 2 =  100 4 1 30 |
| 29. | Complete the calculation below using the correct order of operations. |
| 30. | Use lines to join the pairs of expressions which are equal in value. |