Number Properties: Medium Practice Paper 10

Q1. Which of these numbers has exactly three different prime factors?

A. 12 *B.* 30 *C.* 45 *D.* 49 *E.* 16

Q2. The lowest common multiple of 6 and another number is 30. Which of these could be the other number?

A. 4 *B.* 12 *C.* 5 *D.* 20 *E.* 9

Q3. Which of these is a cube number between 100 and 200?

A. 121 *B.* 144 *C.* 150 *D.* 169 *E.* 125

Q4. How many of the whole numbers from 1 to 30 are multiples of 2 or multiples of 3, or both?

A. 15 *B.* 25 *C.* 10 *D.* 20 *E.* 5

Q5. A palindromic number reads the same forwards and backwards, like 131. How many palindromic numbers are there between 100 and 200?

A. 9 *B.* 10 *C.* 11 *D.* 19 *E.* 20

Q6. What is the smallest whole number that has exactly four factors?

A. 4 *B.* 8 *C.* 9 *D.* 10 *E.* 6

myfreeschool

Q7. Four consecutive whole numbers are added together. Which statement about the total is always true?

A. It is always odd

B. It is always a multiple of 4

C. It is always even

D. It is always a multiple of 3

E. It is always a square number

Q8. A three-digit number has three identical digits. Its digits add up to a square number. What is the number?

A. 111 *B.* 222 *C.* 444 *D.* 999 *E.* 333

Q9. A power of 2 is a number made by multiplying 2s together, such as $2 \times 2 \times 2 = 8$. Which of these is a power of 2?

A. 24 *B.* 48 *C.* 64 *D.* 100 *E.* 36

Q10. A whole number is a multiple of 6. Which of these statements must be true?

A. It is a multiple of 4

B. It is a multiple of 12

C. It ends in the digit 6

D. It is even

E. It is bigger than 10

Q11. Which pair of numbers has a highest common factor of 6?

A. 12 and 18 *B.* 6 and 9 *C.* 12 and 24 *D.* 18 and 36 *E.* 8 and 14

Q12. Which of these numbers can be written as the sum of two square numbers?

A. 3 *B.* 6 *C.* 7 *D.* 11 *E.* 13

Q13. The factors of a number, written in order, are 1, 2, 4, 5, 10 and n. What is the value of n?

A. 15 *B.* 25 *C.* 20 *D.* 40 *E.* 50

Q14. What is the smallest three-digit prime number?

A. 100 *B.* 103 *C.* 107 *D.* 101 *E.* 111

Q15. The digits of an odd two-digit number multiply to make 12 and add up to 7. What is the number?

A. 34 *B.* 26 *C.* 62 *D.* 61 *E.* 43

myfreeschool