

Playing with Numbers

Question 1.

The LCM of 12 and 16 is:

- (a) 32
- (b) 60
- (c) 48
- (d) none of these

Answer: (c) 48

Explanation: 48

2	12, 16
2	6, 8
2	3, 4
2	3, 2
3	3, 1
	1, 1

$$\text{LCM} = 2 \times 2 \times 2 \times 2 \times 3 = 48$$

Question 2.

What are the numbers which have more than two factors called?

- (a) Even numbers
- (b) Prime numbers
- (c) Composite numbers
- (d) Odd numbers

Answer: (c) Composite numbers

Question 3.

The sum of two odd and one even numbers is

- (a) Even
- (b) Prime
- (c) Composite
- (d) Odd

Answer: (a) Even

Question 4.

The number which is divisible by 5 is:

- (a) 422
- (b) 423
- (c) 424
- (d) 425

Answer: (d) 425

Explanation: 425, a number is divisible by 5 if its unit's digit is either 0 or 5.

Question 5.

The HCF of 12 and 40 is:

- (a) 3
- (b) 4
- (c) 5
- (d) 6

Answer: (b) 4

Explanation: 4,

$$2 \times 2 \times 3$$

$$\text{HCF} = 2 \times 2 = 4$$

$$40 = 2 \times 2 \times 2 \times 5$$

Question 6.

Every _____ of a number is greater than or equal to that number.

- (a) factor
- (b) number
- (c) multiple
- (d) none to these

Answer: (c) multiple

Question 7.

What is the H.C.F. of two co-prime numbers?

- (a) 1
- (b) 0
- (c) 2
- (d) 4

Answer: (a) 1

Question 8.

The LCM of 12, 15, 45 is:

- (a) 170
- (b) 180
- (c) 190
- (d) 200

Answer: (b) 180

Explanation: 180

2	12, 15, 45
2	6, 15, 45
3	3, 15, 45
3	1, 5, 15
5	1, 5, 5
	1, 1, 1

$$\text{LCM} = 2 \times 2 \times 3 \times 3 \times 5 = 180$$

Question 9.

Find the HCF of 27, 63.

- (a) 2
- (b) 6
- (c) 3
- (d) 9

Answer: (d) 9

Question 10.

_____ is the smallest prime number which is even.

- (a) 2

- (b) 4
- (c) 3
- (d) 1

Answer: (a) 2

Question 11.

If a number is divisible by 10, then which of the following can be its one's digit?

- (a) 2
- (b) 3
- (c) 4
- (d) 0

Answer: (d) 0

Question 12.

The value of $10 + 40 \div 8 \times 2 - 9$ is:

- (a) 9
- (b) 10
- (c) 11
- (d) 12

Answer: (c) 11

Explanation: $10 + 40 \div 8 \times 2 - 9 = 10 + 5 \times 2 - 9 = 10 + 10 - 9 = 20 - 9 = 11$ (BODMAS Rule)

Question 13.

The number which is divisible by 3 is:

- (a) 135
- (b) 136
- (c) 137
- (d) 139

Answer: (a) 135

Explanation: $135, 1 + 3 + 5 = 9$ which is divisible by 3 therefore no. is divisible.

Question 14.

The only prime number which is also even is

- (a) 6
- (b) 1

- (c) 2
- (d) 4

Answer: (c) 2

Question 15.

Which of the following is the L.C.M. of 36 and 72?

- (a) 36
- (b) 72
- (c) 108
- (d) 2

Answer: (b) 72

Question 16.

A prime number is a number which:

- (a) is divisible by 2
- (b) is not divisible by 2
- (c) has no factors
- (d) has exactly two factors

Answer: (d) has exactly two factors

Explanation: Exactly two factors are 1 and the number itself.

Question 17.

Which of them is composite number?

- (a) 6
- (b) 5
- (c) 7
- (d) 3

Answer: (a) 6

Question 18.

Which of them is prime number?

- (a) 3
- (b) 6
- (c) 9
- (d) 8

Answer: (a) 3

Question 19.

The value of $18 - 3 \times 4 + 1$ is:

- (a) 61
- (b) 75
- (c) 7
- (d) none of these

Answer: (c) 7

Explanation: $7, 18 - 3 \times 4 + 1 = 18 - 12 + 1 = 19 - 12 = 07$ (BODMAS Rule)

Question 20.

Prime factors of 45 are:

- (a) 5, 9
- (b) 3, 15
- (c) 3, 3, 5
- (d) none of these

Answer: (c) 3, 3, 5

Explanation: $45 = 3 \times 3 \times 5$.

Question 21.

Which of the following is the prime factorisation of 140?

- (a) $2 \times 2 \times 7$
- (b) $2 \times 2 \times 5$
- (c) $2 \times 2 \times 5 \times 7$
- (d) $2 \times 2 \times 5 \times 7 \times 3$

Answer: (c) $2 \times 2 \times 5 \times 7$

Question 22.

Which is the number that is neither prime nor composite?

- (a) 0
- (b) 1
- (c) 2
- (d) 5

Answer: (b) 1

Question 23.

The common factors of 24 and 40 are:

- (a) 1, 3, 4, 8
- (b) 1, 2, 4, 8
- (c) 1, 4, 5, 9
- (d) none of these

Answer: (b) 1, 2, 4, 8

Explanation: 1, 2, 4, 8. 24 and 40 are both divisible by 1, 2, 4, 8.

Question 24.

Value of $30 + 14 \div 2$ is:

- (a) 22
- (b) 29
- (c) 37
- (d) none of these

Answer: (c) 37

Explanation: 37, $30 + 14 \div 2 = 30 + 7 = 37$ (By BODMAS Rule)

Question 25.

901153 is divisible by ____.

- (a) 3
- (b) 5
- (c) 11
- (d) 7

Answer: (c) 11

Question 26.

If a number is divisible by 2 and 3 both then is divisible by

- (a) 3
- (b) 6
- (c) 5
- (d) 7

Answer: (b) 6

Question 27.

Which of the following numbers is a prime number?

- (a) 10
- (b) 11
- (c) 12
- (d) 15

Answer: (b) 11

Explanation: 11 has factors 1 and 11 only.

Question 28.

The smallest prime number is:

- (a) 1
- (b) 2
- (c) 3
- (d) none of these

Answer: (b) 2

Explanation: Prime numbers start from the number 2.

Question 29.

Which of these numbers is a factor of every number?

- (a) 0
- (b) 1
- (c) 2
- (d) 4

Answer: (b) 1

Question 30.

Number of factors of a given number are _____.

- (a) finite
- (b) infinite
- (c) 3
- (d) 2

Answer: (a) finite

Question 31.

What is the H.C.F. of 120, 144 and 216?

- (a) 38
- (b) 24

- (c) 120
- (d) 144

Answer: (b) 24

Question 32.

Every prime number except _____ is odd.

- (a) 5
- (b) 7
- (c) 2
- (d) 3

Answer: (c) 2

Question 33.

What are the numbers which are multiples of 2 called?

- (a) Odd numbers
- (b) Even numbers
- (c) Prime numbers
- (d) Composite numbers

Answer: (b) Even numbers

Question 34.

The number which is divisible by 2 is:

- (a) 135
- (b) 136
- (c) 137
- (d) 139

Answer: (b) 136

Explanation: 136 is an even no. and every even no. is divisible by 2.

Question 35.

The LCM of 8 and 6 is:

- (a) 22
- (b) 24
- (c) 26
- (d) 28

Answer: (b) 24

Explanation: 4

2	8, 6
2	4, 3
2	2, 3
3	1, 3
	1, 1

$$\text{LCM} = 2 \times 2 \times 2 \times 3 = 24$$

Question 36.

The largest three digit number which is exactly divisible by 3 is:

- (a) 999
- (b) 996
- (c) 992
- (d) none of these

Answer: (a) 999

Explanation: $999, 9 + 9 + 9 = 27$ which is divisible by 3.

Question 37.

_____ is the factor of 68.

- (a) 6
- (b) 5
- (c) 3
- (d) 17

Answer: (d) 17

Question 38.

Choose the maximum consecutive numbers less than 100 so that there is no prime number between them.

- (a) 6
- (b) 5
- (c) 7
- (d) 8

Answer: (c) 7

Fill in the blanks:

1. First 5 multiples of 5 are

Answer: 5, 10, 15, 20, 25

2. Is 39 a prime number?

Answer: yes

3. All the factors of 20 are

Answer: 1, 2, 4, 5, 10, 20

4. First three multiples of 16 are

Answer: 16, 32, 48

5. 146 8 is divisible by 3.

Answer: 2

6. In each of the following, fill in the blanks with the smallest digit to make it divisible by 3.

(i) 75 3

(ii) 135 8

(iii) 2375

(iv) 2159

Answer: (i) 3, (ii) 1, (iii) 1, (iv) 1

7. In each of the following, fill in the blanks with the smallest digit to make it divisible by 11.

(i) 1083 2

(ii) 620 53

(iii) 86 41

Answer: (i) 7, (ii) 6, (iii) 1

8. $LCM \times HCF = \dots \times \dots$

Answer: first number $\times$ second number

9. The smallest prime number is

Answer: 2
