

Exercise 2A

Q1

Answer:

Factor: A factor of a number is an exact divisor of that number.

Multiple: A multiple of a number is a number obtained by multiplying it by a natural number.

: 1, 3, 5 and 15 are the factors of 15.

In other words, we can say that 15 is a multiple of 1, 3, 5 and 15.

Example 2: We know that $8 = 8 \times 1$, $8 = 2 \times 4$ and $8 = 4 \times 2$

: 1, 2, 4 and 8 are the factors of 8.

In other words, we can say that 8 is a multiple of 1, 2, 4 and 8.

Example 3: We know that $30 = 30 \times 1$, $30 = 5 \times 6$ and $30 = 6 \times 5$

Q2

Answer:

(i) 20

 $20 = 1 \times 20$; $20 = 10 \times 2$ and $20 = 4 \times 5$

The factors of 20 are 1, 2, 4, 5, 10 and 20.

(ii) 36

 $36 = 1 \times 36$; $36 = 2 \times 18$; $36 = 3 \times 12$ and $36 = 4 \times 9$ The factors of 36 are 1, 2, 3, 4, 6, 9, 12 and 36.

(iii) 60

 $60 = 1 \times 60$; $60 = 2 \times 30$; $60 = 3 \times 20$; $60 = 4 \times 15$ and $60 = 5 \times 12$ The factors of 60 are 1, 2, 3, 4, 5, 6, 10, 12, 15 and 60.

(iv) 75

 $75 = 1 \times 75$; $75 = 3 \times 25$ and $75 = 5 \times 15$ The factors of 75 are 1, 3, 5, 15, 25 and 75.

Q3

Answer:

(i) 17

 $17 \times 1 = 17$; $17 \times 2 = 34$; $17 \times 3 = 51$; $17 \times 4 = 68$ and $17 \times 5 = 85$ The first five multiples of 17 are 17, 34, 51, 68 and 85.

(ii) 23

 $23 \times 1=23$; $23 \times 2=46$; $23 \times 3=69$; $23 \times 4=92$ and $23 \times 5=115$ The first five multiples of 23 are 23, 46, 69, 92 and 115.

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(iii) 65
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 $65 \times 1 = 65$; $65 \times 2 = 130$; $65 \times 3 = 195$; $65 \times 4 = 260$ and $65 \times 5 = 325$ \therefore The first five multiples of 65 are 65, 130, 195, 260 and 325.

(iv) 70

 $70 \times 1=70$; $70 \times 2 = 140$; $70 \times 3 = 210$; $70 \times 4 = 280$ and $70 \times 5 = 350$ \therefore The first five multiples of 70 are 70, 140, 210, 280 and 350.

Q4

Answer:

(i) 32

Since 32 is a multiple of 2, it is an even number.

(ii) 37

Since 37 is not a multiple of 2, it is an odd number.

(iii) 50

Since 50 is a multiple of 2, it is an even number.

(iv) 58

Since 58 is a multiple of 2, it is an even number.

(v) 69

Since 69 is not a multiple of 2, it is an odd number.

(vi) 144

Since 144 is a multiple of 2, it is an even number.

(vii) 321

Since 321 is not a multiple of 2, it is an odd number.

(viii) 253

Since 253 is not a multiple of 2, it is an odd number.

Q5

Answer:

Prime number: A number is called a prime number if it has only two factors, namely 1 and itself .

Examples: 2, 3, 5, 7, 11, 13, 17, 19, 23 and 29 are prime numbers.

Q6

Answer:

- (i) All prime numbers between 10 and 40 are 11, 13, 17, 19, 23, 29, 31 and 37.
- (ii) All prime numbers between 80 and 100 are 83, 89 and 97.
- (iii) All prime numbers between 40 and 80 are 41, 43, 47, 53, 59, 61, 67, 71, 73 and 79.
- (iv) All prime numbers between 30 and 40 are 31 and 37.

Q7

Answer:

- (i) The smallest prime number is 2.
- (ii) There is only one even prime number, i.e., 2.
- (iii) The smallest odd prime number is 3.

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