

**SESSION : 21**

**CLASS : V**

**SUBJECT : MATHEMATICS**

**CHAPTER NUMBER: 8**

**CHAPTER NAME : FACTORS AND MULTIPLES**

**SUB-TOPIC : Activity – Sieve of Eratosthenes**

**Exercise – 8 A Q. No. 6 to 11**

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**CHANGING YOUR TOMORROW**

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## **LEARNING OBJECTIVE :**

**Enable the students**

- **To understand the difference between multiples and factors**
- **To understand the concept of prime, composite, co-prime and twin prime numbers.**
- **To understand the properties of Factors and multiples.**

# Let's revise

## Prime Number & Composite Numbers

### SIEVE OF ERATOSTHENES



	2	3	4	5	6	7	8	9	10	Prime numbers
11	12	13	14	15	16	17	18	19	20	
21	22	23	24	25	26	27	28	29	30	
31	32	33	34	35	36	37	38	39	40	
41	42	43	44	45	46	47	48	49	50	
51	52	53	54	55	56	57	58	59	60	
61	62	63	64	65	66	67	68	69	70	
71	72	73	74	75	76	77	78	79	80	
81	82	83	84	85	86	87	88	89	90	
91	92	93	94	95	96	97	98	99	100	
101	102	103	104	105	106	107	108	109	110	
111	112	113	114	115	116	117	118	119	120	



## EXERCISE 8 [A]



### 5. Find the multiples :

a. Find the first six multiples of 9 : 9, 18, 27, 36, 45 and 54

b. Find the seventh multiple of 16 : 112

c. Find the fifth multiple of 15 : 75

d. Find the ninth multiple of 16 : 144

e. Find the multiples of 11 greater than 55 but less than 180 :

66, 77, 88, 99, 110, 121, 132, 143, 154, 165, 176

f. Find the multiples of 15 greater than 120 but less than 225 :

135, 150, 165, 180, 195, 210



## EXERCISE 8 [A]



6. Write down the prime numbers between :

a. 50 to 65

53, 59, and 61

b. 80 to 100

83, 89 and 97

c. 110 to 125

113

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100



## EXERCISE 8 [A]



**7. Write down the composite numbers between :**

a. 70 to 80 : **72, 74, 75, 76, 77, and 78**

b. 100 to 110 :

**102, 104, 105, 106 and 108**

c. 40 to 50 : **42, 44, 45, 46, 48, and 49**

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100



## EXERCISE 8 [A]

8. Is 1 a prime number ? **NO**

9. What is the smallest composite number ? **4**

10. Write the prime number which is even. **2**

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100



## EXERCISE 8 [A]



**11. Find the prime factors of the following numbers :  
27, 35, 63, 91, 100, 77, 54, and 143.**

a)

$$\begin{array}{r} 3 \overline{) 27} \\ \underline{3} \phantom{0} \\ 3 \phantom{0} \\ \underline{3} \phantom{0} \\ 0 \end{array}$$

So, Prime factors of 27 is 3.

c)

$$\begin{array}{r} 3 \overline{) 63} \\ \underline{3} \phantom{0} \\ 3 \phantom{0} \\ \underline{3} \phantom{0} \\ 0 \end{array}$$

So, Prime factors of 63 are 3 and 7.

b)

$$\begin{array}{r} 5 \overline{) 35} \\ \underline{5} \phantom{0} \\ 0 \end{array}$$

So, Prime factors of 35 are 5 and 7.

d)

$$\begin{array}{r} 7 \overline{) 91} \\ \underline{7} \phantom{0} \\ 0 \end{array}$$

So, Prime factors of 91 is 7 and 13.



## EXERCISE 8 [A]



**11. Find the prime factors of the following numbers :  
27, 35, 63, 91, 100, 77, 54, and 143.**

e)

$$\begin{array}{r} 2 \overline{) 100} \\ \underline{200} \phantom{0} \\ 2 \overline{) 50} \\ \underline{100} \phantom{0} \\ 5 \overline{) 25} \\ \underline{50} \\ 5 \end{array}$$

So, Prime factors of 100 are 2 and 5.

g)

$$\begin{array}{r} 2 \overline{) 54} \\ \underline{108} \\ 3 \overline{) 27} \\ \underline{81} \\ 3 \overline{) 9} \\ \underline{27} \\ 3 \end{array}$$

So, Prime factors of 54 are 2 and 3.

f)

$$\begin{array}{r} 7 \overline{) 77} \\ \underline{77} \\ 11 \end{array}$$

So, Prime factors of 77 are 7 and 11.

d)

$$\begin{array}{r} 11 \overline{) 143} \\ \underline{121} \\ 13 \end{array}$$

So, Prime factors of 143 is 11 and 13.

## **HOME ASSIGNMENT:**

- **Complete Exercise – 8 (A) Q.NO. 6 to 11 in your note book.**

## **LEARNING OUTCOME:**

**Students are able**

- **To understand the difference between multiples and factors**
- **To understand the concept of prime, composite, co-prime and twin prime numbers.**
- **To understand the properties of Factors and multiples.**

**THANKING YOU**  
**ODM EDUCATIONAL GROUP**