Ex - 8.1

1.(i) 15 = 1, 3, 5, 15

(ii) 55 = 1, 5, 11, 55

(iii) 48 = 1, 2, 3, 4, 6, 8, 12, 16, 24, 48

(iv) 36 = 1, 2, 3, 4, 6, 6, 9, 12, 18, 36

(v) 84 = 1, 2, 3, 4, 6, 7, 12, 14, 21, 28, 42, 84

2.(i) ~~25~~ Less than 25 = 2, 3, 5, 7, 11, 13, 17, 19, 23

(ii) between 15 and 35 = 17, 19, 23, 29, 31

(iii) between 8 and 76 = 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47, 53, 59, 61, 67, 71, 73

3. (i) 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43
(ii) 2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31
(iii) 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47
(iv) 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47, 53.

Classwork

- **Even no.:** The numbers whose one's digit is 0, 2, 4, 6 or 8 are called even numbers.
- **Odd no.:** The numbers whose one's digit is 1, 3, 5, 7 or 9 are called odd numbers.
- **Prime no.:** The numbers which have only two factors i.e. one and the number itself are called prime numbers.
- **Composite no.:** The numbers which have more than two factors are called composite numbers.

Exercise 8.1

4. (i) $16 = 2 \mid 16$

2	8
2	4
2	2
	1

~~16 = 2 × 2 × 2 ×~~
$16 = 2 \times 2 \times 2 \times 2$

So, prime factor of 16 is 2.

(ii) $27 = 3 \mid 27$

3	9
3	3
	1

$27 = 3 \times 3 \times 3$

So, the prime factor of 27 is 3.

(iii) $35 = 5 \mid 35$

7	7
	1

$35 = 5 \times 7$

So, the prime factors of 35 are 5 and 7.

(iv) $49 =$

$7 \mid 49$

$7 \mid 7$

1

$49 = 7 \times 7$

So, the prime factor of 49 is 7.

5. (i) P_6 = Prime factors of $6 = 2, 3$

So, prime factors of 6 are 2 and 3.

(ii) P_{24} = Prime factors of $24 = 2, 3$.

So, prime factors of 24 are 2 and 3.

(iii) P_{50} = Prime factors of $50 = 2, 5$.

So, ~~pi~~ prime factors of 50 are 2 and 5.