

Exercise-5(CF)

1. i) $1 \times 9 + 1 = 10$

$12 \times 9 + 2 = 110$

$123 \times 9 + 3 = 1110$

$1234 \times 9 + 4 = 11110$

$12345 \times 9 + 5 = 111110$

$123456 \times 9 + 6 = 1111110$

ii) $9 \times 9 + 7 = 88$

$98 \times 9 + 6 = 888$

$987 \times 9 + 5 = 8888$

$9876 \times 9 + 4 = 88888$

$98765 \times 9 + 3 = 888888$

$987654 \times 9 + 2 = 8888888$

iii) $1 \times 8 + 1 = 9$

$12 \times 8 + 2 = 98$

$123 \times 8 + 3 = 987$

$1234 \times 8 + 4 = 9876$

$12345 \times 8 + 5 = 98765$

$123456 \times 8 + 6 = 987654$

iv) $111 \div 3 = 37$

$222 \div 6 = 37$

$333 \div 9 = 37$

$444 \div 12 = 37$

$555 \div 15 = 37$

$666 \div 18 = 37$

2. i)

6	7	<u>2</u>
<u>1</u>	5	9
8	<u>3</u>	4

ii)

4	<u>9</u>	8
<u>11</u>	7	<u>3</u>
<u>6</u>	5	10

iii)

16	2	<u>12</u>
<u>6</u>	10	<u>14</u>
<u>8</u>	<u>18</u>	4

3. i)

n	1	2	3
S	7	10	13

'n' denotes the number of figures.

'S' denotes the number of matchsticks.

$$S \text{ in terms of } n = n \times 3 + 4 = S$$

$$\text{So, } S = n \times 3 + 4$$

$$= 3n + 4$$

ii) 1) 15th figure = $15 \times 3 + 4 = 49$ matchsticks.

2) 40th figure = $40 \times 3 + 4 = 124$ matchsticks.