Hcw

EXERCISE-5(F)

① For each pattern, given below, write the next three steps:

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

$12 \times 9 + 2 = 110$

$123 \times 9 + 3 = 1110$

Ans- $1234 \times 9 + 4 = 11110$

$12345 \times 9 + 5 = 1,11,110$

$123456 \times 9 + 6 = 11,11,110$

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

$98 \times 9 + 6 = 888$

$987 \times 9 + 5 = 8,888$

Ans- $9876 \times 9 + 4 = 88,888$

$98765 \times 9 + 3 = 8,88,888$

$9,87,654 \times 9 + 2 = 88,88,888$

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

$12 \times 8 + 2 = 98$

$123 \times 8 + 3 = 987$

Ans- $1,234 \times 8 + 4 = 9876$

$12,345 \times 8 + 5 = 98765$

$1,23,456 \times 8 + 6 = 987654$

iv) $111 \div 3 = 37$

$222 \div 6 = 37$

$333 \div 9 = 37$

Ans- $444 \div 12 = 37$

$555 \div 15 = 37$

$666 \div 18 = 37$

(2) Complete each of the following magic squares:-

i)

6	7	2
1	5	9
8	3	4

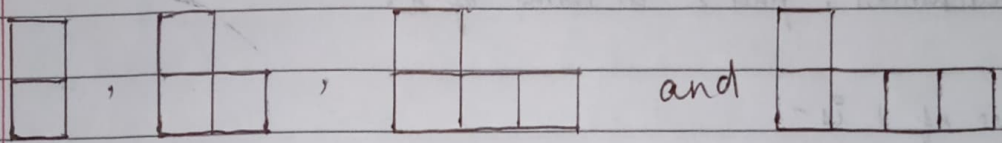
ii)

4	9	8
11	7	3
6	5	10

iii)

16	2	12
6	10	14
8	18	4

(3) See the following pattern carefully:



i) If n denotes the no. of ~~pod~~ figures and S denotes the number of matchsticks; find S in terms of n.

Ans $S = 3n + 4$

ii) (1) 15 th figure has = $3 \times 15 + 4$

$= 45 + 4$

$= 49$ matchsticks.

(2) 40 th figure has = $3 \times 40 + 4$

$= 120 + 4$

$= 124$ matchsticks.

iii) It is clear that each time the figure (n) is increased by 4, the no. of matchsticks (SB) are increased by 3.