HW 8/5/2021

Date - 13/5/2021
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class - VI sec - B

Ex-5 F

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. Complete each of the following magic squares:

(i)

6	7	2
1	5	9
8	3	4

4	9	8
11	7	3
6	5	10

16	2	12
6	10	14
18	8	4

3. (i) figure ① $n = 1$, $S = 7$
$n = 2$, $S = 10$
$n = 3$, $S = 13$
$n = 4$, $S = 16$

(ii) ① 15^{th} figure = 49
② 40^{th} figure = ~~120~~ 124

(iii) ~~$Sn + 3$~~ $S_n = 3n + 4$
It is clear that each time the figure (n) is increased by 4, the number of matches (S) are increased by 3.

GW
12/5/2020

1 (i) In the following patterns, draw the next two figures.

(ii)

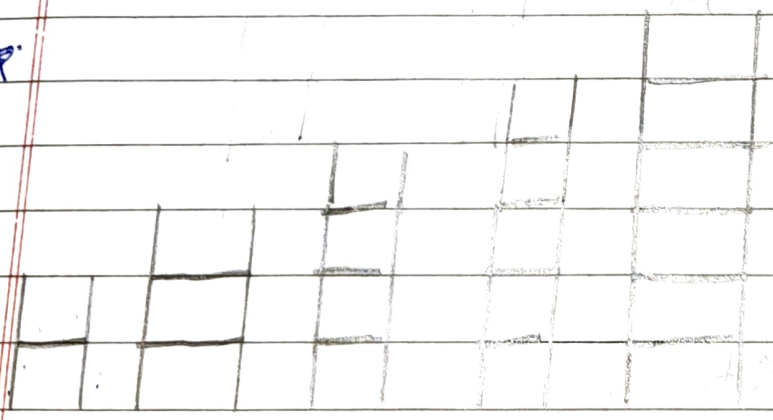
n	1	2	3	4	5
S	2	4	6	8	10

(iii) $L = 2n$

(iv) 12th figure = 24 match sticks.

5 In each of the following patterns, construct the next figure.

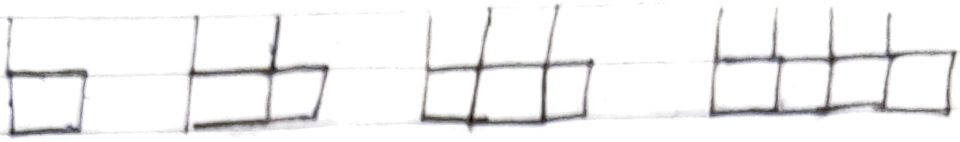
a.



(i) ~~A = 5F~~ $F = 3n + 2$

(ii) 16th figure = ~~80~~ 50 Matchsticks

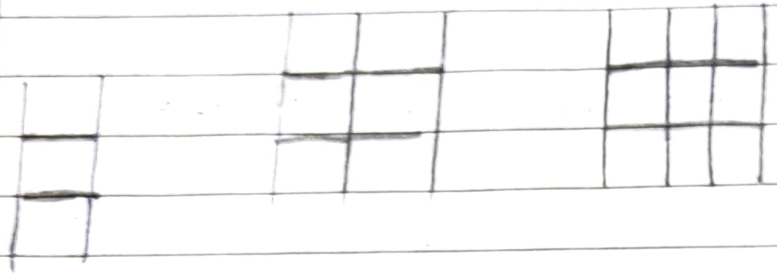
30th figure = ~~150~~ 92 matchsticks

b: 

(i) ~~A~~ 5f $F = 5n + 1$

(ii) 15th figure = ~~80~~ 65

30th figure = ~~150~~ 121

c. 

(i) $F = 5n + 3$

(ii) 16th figure = 83

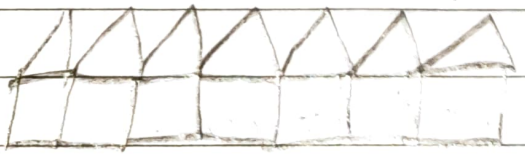
30th figure = 153

d: 

(i) $F = 4n + 1$

(ii) 16th figure = 65

30th figure = 121

e: 

(i) $F = 5n + 1$ (ii) 16^{th} figure - 81 36^{th} figure = 118

F