

St. Andrews Scots Sr. Sec. School

I.P.Extension, Patparganj, Delhi- 110092

Session:2026-2027

Subject: Mathematics

Class: IV

Unit-12 (Patterns & Symmetry)

Questions to be done:

Ex 12A: - Book

Ex 12B: - Book

Review Time

Worksheet

Activity

Exercise 12A

1. (a) 1, 2, 3, 5, 8, 13, $\boxed{21}$, $\boxed{34}$, $\boxed{55}$.

Rule : Add the two previous numbers.

- (b) 30, 35, 33, 38, $\boxed{36}$, $\boxed{41}$, $\boxed{39}$.

Rule : Add 5, subtract 2.

- (c) 122, 120, 115, 113, 108, 106, $\boxed{101}$, $\boxed{99}$, $\boxed{94}$.

Rule : Subtract 2 then subtract 5.

- (d) 4, 12, 36, 108, $\boxed{324}$, $\boxed{972}$, $\boxed{2916}$.

Rule : Multiply with 3 at every number to get next number.

- (e) 1, 3, 6, 10, 15, $\boxed{21}$, $\boxed{28}$, $\boxed{36}$.

Rule : Consecutive numbers are added starting from 2.

2. (a) $1 + 2 = \underline{3}$
 $1 + 2 + 3 = \underline{6}$
 $1 + 2 + 3 + 4 = \underline{10}$
 $1 + 2 + 3 + 4 + 5 = \underline{15}$
 $1 + 2 + 3 + 4 + 5 + 6 = \underline{21}$
 $1 + 2 + 3 + 4 + 5 + 6 + 7 = \underline{28}$
- (b) $111 \div 3 = 37$
 $222 \div 6 = 37$
 $333 \div 9 = 37$
 $444 \div \underline{12} = 37$
 $555 \div \underline{15} = \underline{37}$
 $\underline{666} \div 18 = 37$

Rule : $\frac{n(n+1)}{2}$ (where n is the total numbers to be added)

3. (a) 2 (b) 11 (c) 11

4.

Number of triangles	1	2	3	4	5
Number of matchsticks	3	5	⑦	⑨	⑪

Rule : $2n + 1$ (where n is number of triangles).

Exercise 12B

1.

--B--	-D--	-E--	-C--
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Note: N have no lines of symmetry.

2. (a) No (b) Yes (c) Yes (d) Yes (e) Yes
(f) No (g) Yes (h) No
3. (a) Yes (b) No (c) Yes (d) No
4. (a) $\subseteq$ (b) $\perp$ (c) $\mathcal{M}$ (d) $\mathcal{C}$

Review Time

- I. 1. (a) 2. (a) 3. (c) 4. (b) 5. (b)
- II. 1. $5 \times 5 - 4 \times 4 = 5 + 4 = 9$
 $6 \times 5 - 5 \times 5 = 6 + 5 = 11$
 $7 \times 7 - 6 \times 6 = 7 + 6 = 13$
2. $1234 \times \underline{8} + 4 = 9876$
 $\underline{12345} \times 8 + \underline{5} = 98765$
 $123456 \times 8 + \underline{6} = \underline{987654}$
- III. 1. GOD HELPS THOSE WHO HELP THEMSELVES
2. G112U, H224T

