

# CLASS NOTES

Class: V

Topic: Ch.- 7

Subject: Mathematics

Can You See The Pattern?

# 7

## CAN YOU SEE THE PATTERN?

A. Continue the pattern by making a  $\frac{1}{4}$  turn clockwise.

(a)

(b)

(c)

(d)

(e)

B. Continue the pattern by making a  $\frac{3}{4}$  turn clockwise:

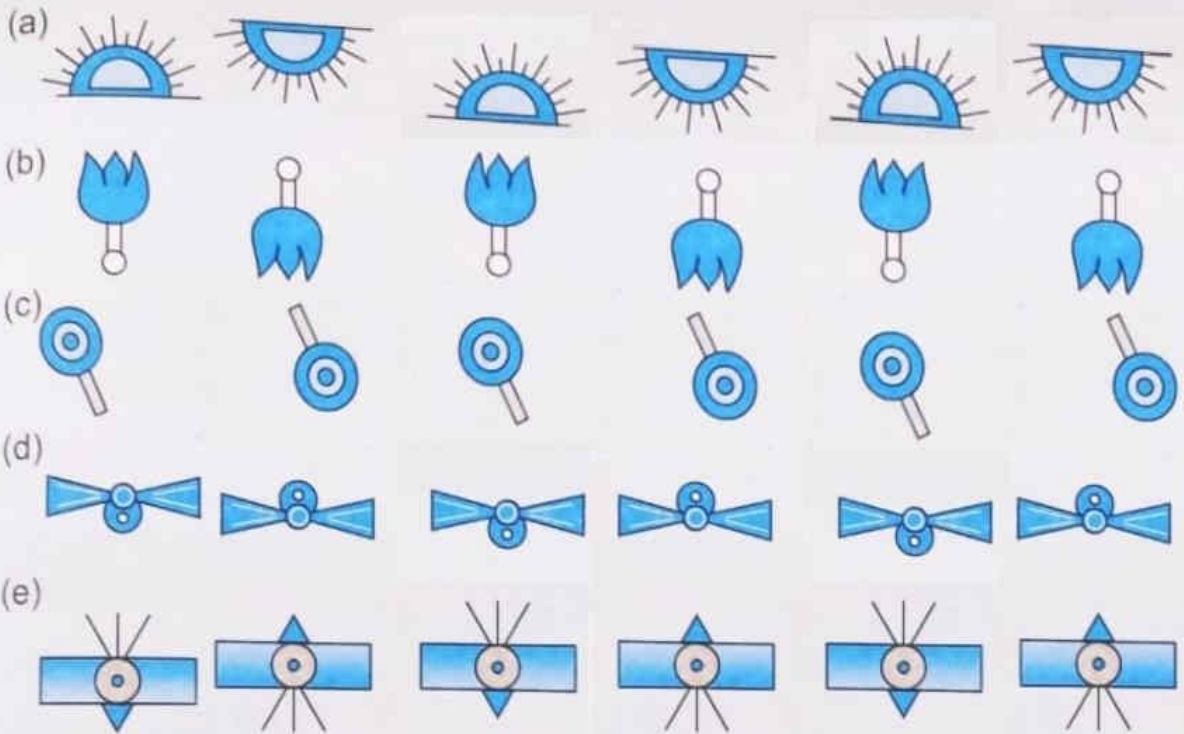
(a)

(b)

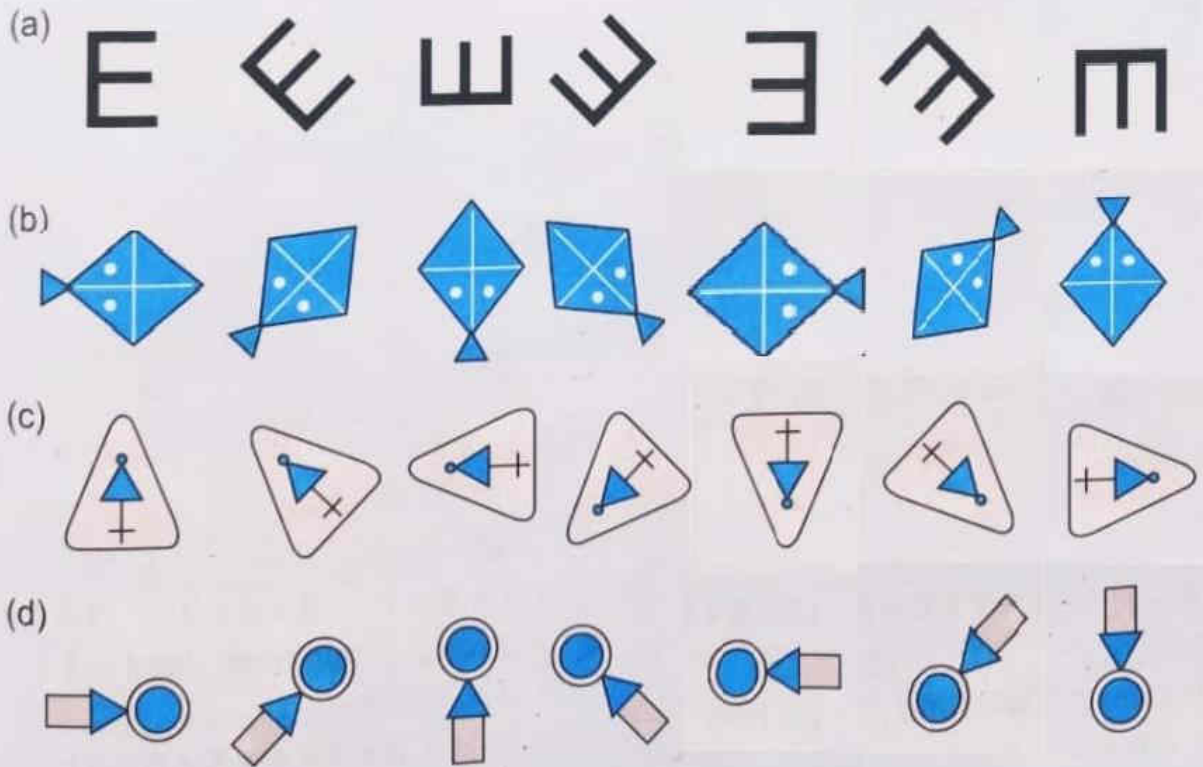
(c)

(d)

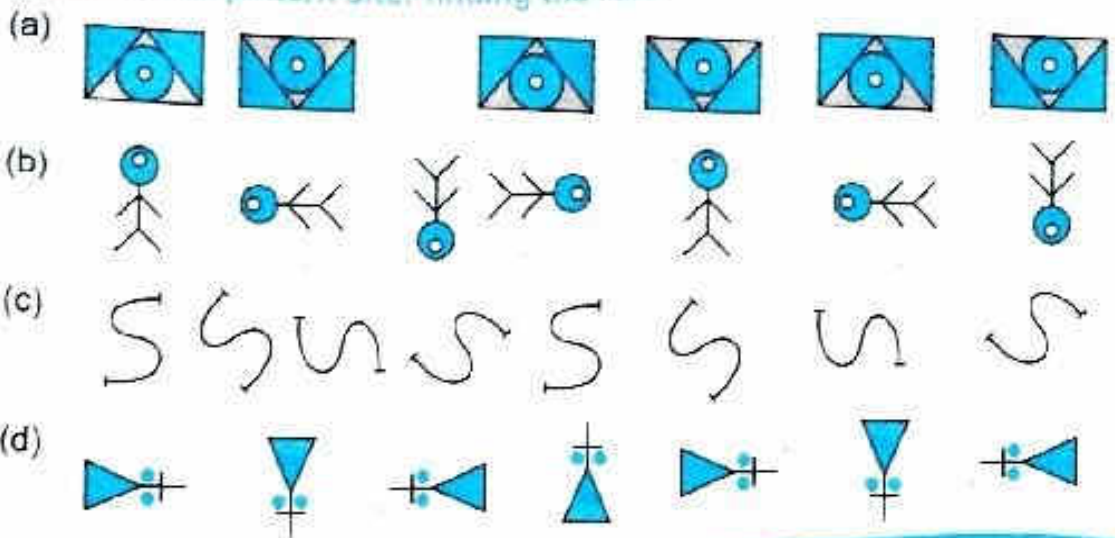
C. Continue the pattern by making a  $\frac{1}{2}$  turn in the anti clockwise direction :



D. Continue the pattern by making a  $45^\circ$  turn in the anti clockwise direction :

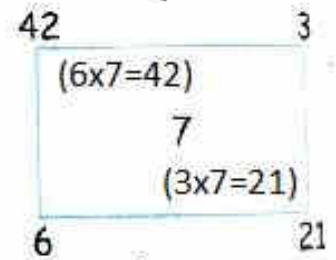
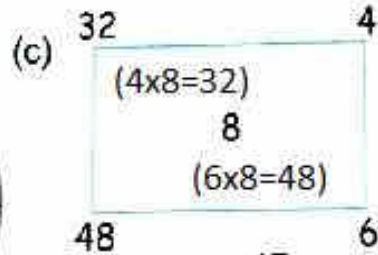
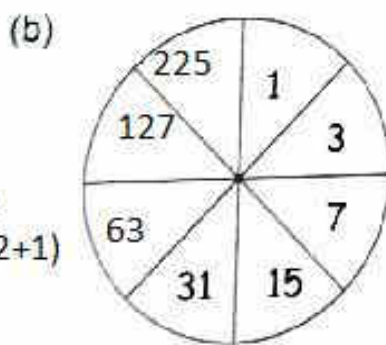
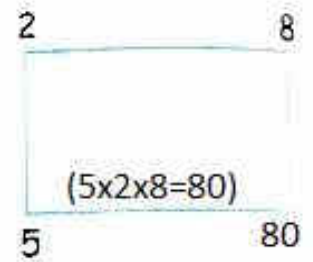
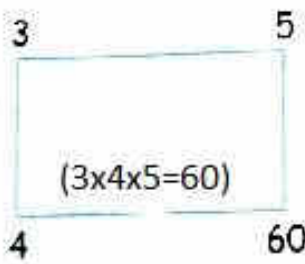
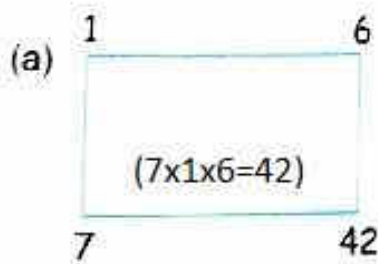


E. Continue the pattern after finding the rule:



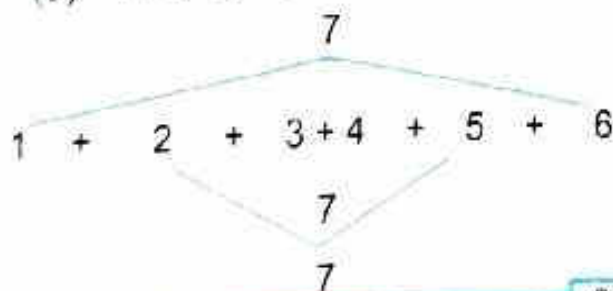
## MAGIC SHAPES

A. Replace the question mark (?) with the correct number:



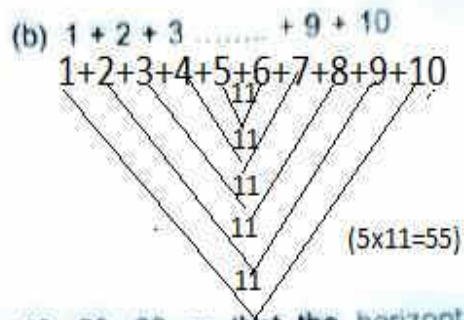
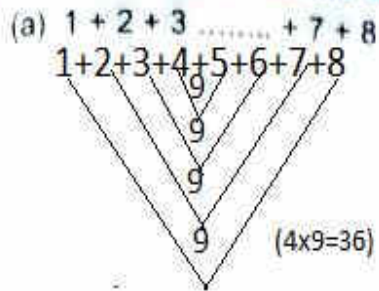
(Rule: no.x2+1)

(d)  $1 + 2 + 3 + 4 + 5 + 6 = 21$

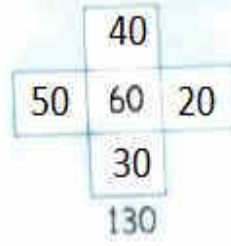
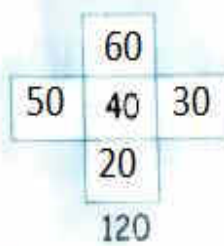
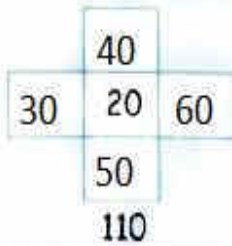


$1 + 6 = 7; 2 + 5 = 7; 3 + 4 = 7$   
 3 pairs of numbers, total = 7  
 $3 \times 7 = 21$   
 $\therefore 1 + 2 + 3 + 4 + 5 + 6 = 21$

Use the short cut to find the sum:



(c) Arrange the numbers 20, 30, 40, 50, 60 so that the horizontal and vertical sums match the total given below.

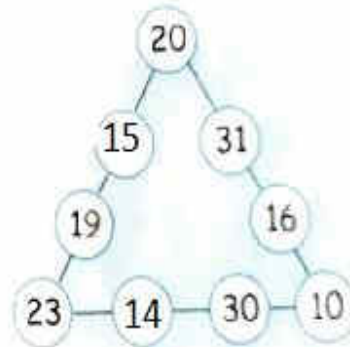


(d)

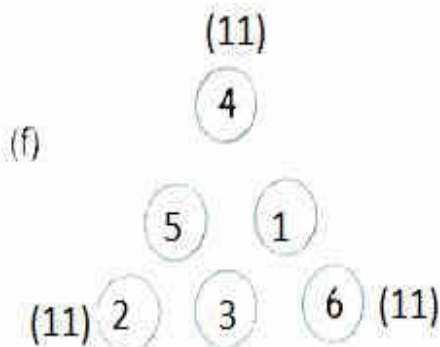
6	2	7	4	9	5
47	15	55	31	71	39

Rule: (no. x 8 - 1)

(e)



The numbers on each side add up to the same number. Find the missing numbers.



Place digits 1 to 6 in the circles such that the sum of the numbers on each side of the triangle is same.

## NUMBER PATTERNS

A. Find the pattern and fill in the blanks:

1.  $643 + 247 = 247 + 643$

2.  $901 + 13 + 64 = 13 + 64 + 901$

3.  $68 \times 31 = 31 \times 68$

4.  $10 \times 18 \times 6 = 18 \times 10 \times 6$

5.  $45 + 609 + 333 = 333 + 45 + 609$

6.  $44 \times 5 = (40 + 4) \times 5$

7.  $32 \times 18 \times 27 = 18 \times 32 \times 27$

8.  $20 \times 5 + 6 \times 5 = 26 \times 5$

B. Observe the pattern and fill in the blanks:

(a) Multiplication by 10, 100, 1000

Example  $6 \times 10 = 60$

$6 \times 100 = 600$

$6 \times 1000 = 6000$

1.  $746 \times 100 = 74600$

2.  $801 \times 1000 = 801000$

3.  $905 \times 10 = 9050$

4.  $3641 \times 1000 = 3641000$

5.  $2075 \times 100 = 207500$

6.  $3000 \times 10 = 30000$

7.  $691 \times 1000 = 691000$

8.  $726 \times 10 = 7260$

(b) Division by 10, 100, 1000

$4654 \div 10, Q = 465, R = 4$

$4654 \div 100, Q = 46, R = 54$

$4654 \div 1000, Q = 4, R = 654$

1.  $5649 \div 10, Q = 564, R = 9$

2.  $2060 \div 100, Q = 20, R = 60$

3.  $70,543 \div 1000, Q = 70, R = 543$

4.  $1392 \div 1000, Q = 1, R = 392$

5.  $2400 \div 10, Q = 240, R = 0$

6.  $7005 \div 100, Q = 70, R = 5$

7.  $1234 \div 10, Q = 123, R = 4$

8.  $60903 \div 1000, Q = 60, R = 903$