

Date: - 03.01.2019

HOME ASSIGNMENT

CLASS VI  
(Term 2)

Ch-11 Algebra

[Ex 11.1, 11.2]

Q1 Write the following using literals, signs of fundamental operations and numbers:

- (i) Perimeter of square is four times the length of a side
- (ii) The diameter of the circle is twice its radius
- (iii) Weight of Arun is 35 kg and weight of Aniket is  $x$  kg  
Find the total weight of both.
- (iv) Weight of a packet of biscuit is  $x$  kg. Find the weight of such 20 packets.
- (v) Length of an eraser is  $x$  cm. Find the total length of such 25 erasers.

Q2 Express each of the following as an algebraic expression

- (i) 7 less than  $y$
- (ii)  $y$  less than the sum of  $x$  and 9
- (iii) Decrease the sum of  $a$  and  $b$  by  $c$
- (iv) 7 is diminished by  $x$
- (v) Write the predecessor of a number

Q3 Find the rule which gives the no. of matchsticks required to make the following matchsticks patterns.  
Use a variable to write the rule.

(i) A pattern of letter L as



(ii) " " " " U as



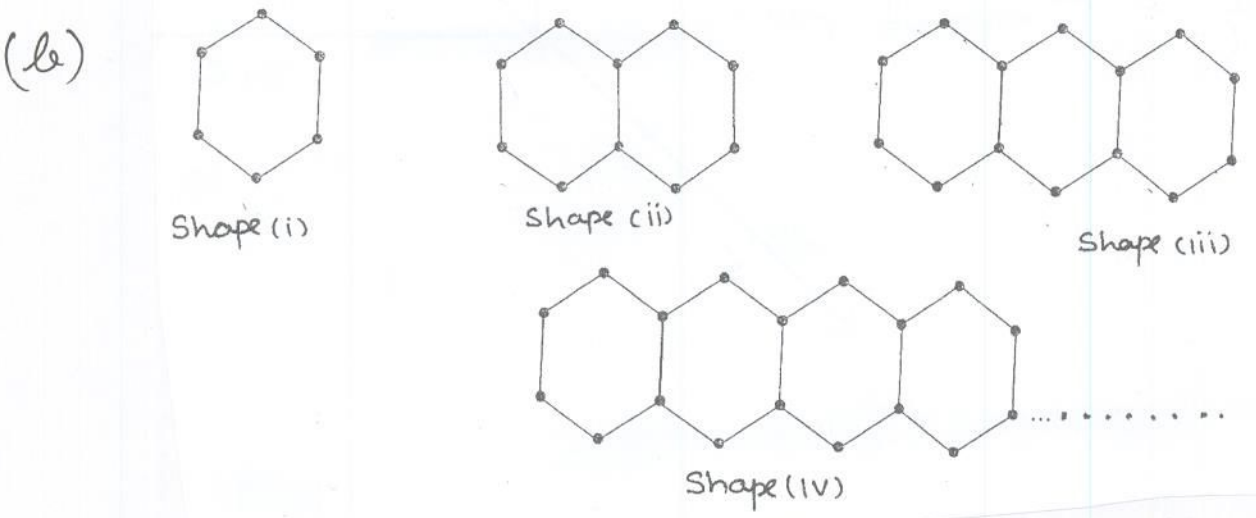
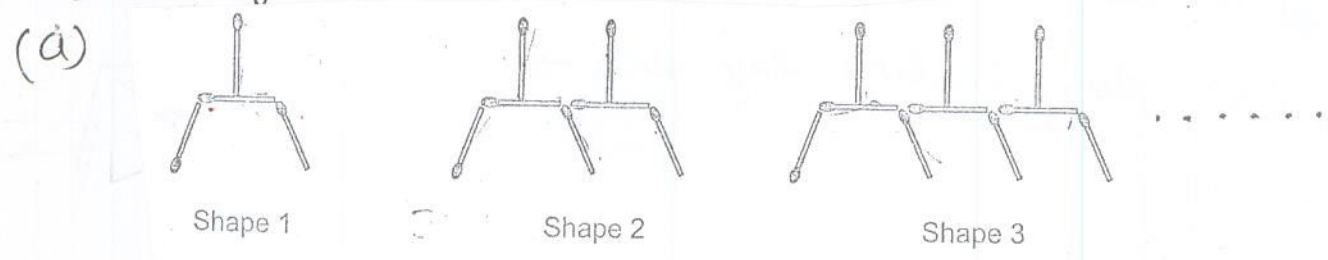
(iii) " " " " S as



(iv) " " " " A as



Q4. Write down the generalised statement for the following patterns (2)



Q5. An athlete runs 1 km in 3 minutes. Express the distance covered by athlete in terms of its running time in minutes?

Q6. Zia went to the market for buying notebooks. If the cost of each notebook is ₹ 25, write the rule to find the cost of 'n' books

Q7. Sidak's brother is 8 years older than her. What is Sidak's brother's age?

Q8. The side of an ~~area~~ equilateral triangle is a. Express the perimeter of the equilateral triangle using a

Q9. The sides of a regular octagon is denoted by x. Express the perimeter of octagon in terms of x

Q10. The base of an isosceles triangle is 5 cm. Length of each of its equal sides is denoted by  $\$$ . Express the perimeter of this triangle in terms of  $\$$

# ANSWERS

Q1 (i)  $P = 4a$  (ii)  $D = 2x$   
(iii)  $(x + 35) \text{ kg}$  (iv)  $(20x) \text{ kg}$   
(v)  $(25x) \text{ cm}$

Q2 (i)  $y - 7$  (ii)  $(x + 9) - y$   
(iii)  $(a + b) - c$  (iv)  $(7 - x)$   
(v)  $y - 1$

Q3 (i)  $2x$  (ii)  $3x$   
(iii)  $5x$  (iv)  $3x$

Q4 (i)  $3x + 1$   
(ii)  $5x + 1$

Q5.  $\frac{t}{3} \text{ km}$

Q6 ₹  $25n$

Q7  $(x + 8) \text{ years}$

Q8  $3a$

Q9  $8x$

Q10  $P = \text{₹} + \text{₹} + 5$   
 $= 2\text{₹} + 5$