## UNDERSTANDING QUADRILATERALS

Q.1	What is the sum of all angles of a hexagon?	
	(a) 180°	(b) 360°
	(c) 540°	(d) 720°
Q.2	A quadrilateral whose all sides are equal , opposite angles are equal and diagonals bisect each other at right angle is a	
	(a) Rhombus	(b) Parallelogram
	(c) Square	(d) Rectangle
Q.3	Which of the following is an equiangular and equilateral polygon?	
	(a) Rectangle	(b) Square
	(c) Rhombus	(d) Right – angle Triangle
Q.4	Which one has all properties of kite and parallelogram?	
	(a) Trapezium	(b) Rhombus
	(c) Rectangle	(d) None of these
Q.5	The number of sides of a regular polygon whose each exterior angle has a measure of $36^{o}$ .	
	(a) 8	(b) 12
	(c) 14	(d) 10
Q.6	If the diagonals of Rhombus are 8 cm and 6 cm. Then find its side length.	
	(a) 3 cm	(b) 4 cm
	(c) 5 cm	(d) 6 cm
Q.7	Which of the following statement is true?	
	(a) All rhombuses are squares	
	(b) Rectangle is a regular quadrilateral	
	(c) Diagonals of Rhombus are equal	
	(d) All squares are rectangles	
Q.8	Which of the following is a formula to find the sum of interior angles of polygon of n-sides?	

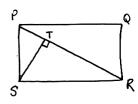
(a) 
$$\frac{n}{2} \times 180^{\circ}$$

(b) 
$$(n-3) \times 180^{\circ}$$

(c) 
$$(n-2) \times 180^{\circ}$$

(d) 
$$(n-1) \times 180^{\circ}$$

Q.9 PQRS is a Rectangle . The perpendicular ST from S on PR divides  $\angle S$  in the ratio 2 : 3 . Find  $\angle TPQ$ .



$$\frac{\text{LPST}}{\text{LTSR}} = \frac{2}{3}$$

(a)  $36^{\circ}$ 

(b)  $18^{o}$ 

(c)  $54^{\circ}$ 

- (d)  $45^{\circ}$
- Q.10 The angles of quadrilateral are in ratio 3:4:5:6. Find the largest angle.
  - (a)  $80^{\circ}$

(b)  $120^{\circ}$ 

(c)  $160^{\circ}$ 

- (d)  $200^{\circ}$
- Q.11 ABCD is a trapezium such that  $AB \parallel CD$ ,  $\angle A: \angle D = 2: 1$  and  $\angle B: \angle C = 7: 5$ . find the value of  $(\angle A + \angle C)$ .
  - (a) 225°

(b) 180°

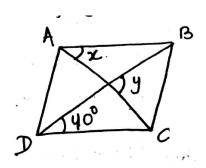
(c)  $195^{\circ}$ 

- (d)  $200^{o}$
- Q.12 The measure of angles of a hexagon are x, (x 5), (x + 5), (2x 5) and (2x + 18). find the value of .
  - (a) 78

(b) 80

(c)37

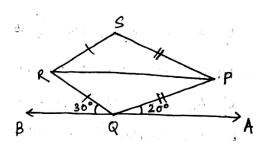
- (d) 45
- Q.13 ABCD is a Rhombus. Then the value of (y x) is



(a)  $40^{\circ}$ 

(b)  $50^{\circ}$ 

Q.14 PQRS is a kite and Q lies on line AB. If  $\angle R = 40^{\circ}$ , then find  $\angle P$ .



(a)  $40^{\circ}$ 

(b)  $70^{\circ}$ 

(c)  $50^{\circ}$ 

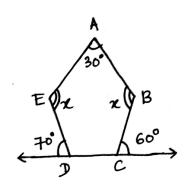
- (d)  $60^{\circ}$
- Q.15 For which of the following, Diagonals are equal?
  - (a) Kite

- (b) Rhombus
- (c) Rectangle
- (d) Trapezium
- Q.16 For which of the following, Both diagonals of Quadrilateral does not bisect each other?
  - (a) Kite

- (b) Rhombus
- (c) Rectangle
- (d) Parallelogram
- Q.17 State the name of a Regular polygon of 7 sides?
  - (a) Pentagon
- (b) Hexagon

(c) Octagon

- (d) Heptagon
- Q.18 Find the value of x:



(a)  $140^{\circ}$ 

(b) 150°

(c)  $130^{\circ}$ 

(d)  $160^{\circ}$ 

ABCD is a Quadrilateral in which  $AB \parallel CD$ . if  $\angle A = \angle B = 40^{\circ}$ . Then find  $(\angle C - \angle D)$ . Q.19 (a)  $180^{\circ}$ (b)  $0^{o}$ (c)  $90^{\circ}$ (d)  $60^{\circ}$ Q.20 ABCD is a parallelogram . The perimeter is 144 cm and BC = 20 cm. Then find AB. (a) 50 cm (b) 52 cm (c) 46 cm (d) 60 cm Q.21 The angles of the Quadrilateral are in ratio 2:5:4:1. Which of the following is true? (a) Largest angle of Quadrilateral is 150° (b) Smallest angle is 40° (c) One of the angle is 80° (d) None of the above Q.22 ABCD is a rectangle. Its diagonals meet at 0. find x, if CO = 2x + 4 and BO = 3x + 1. (a) 1 (b) 3 (c) 4 (d)7Find the value of x in parallelogram ABCD : Q.23 (a)  $28^{\circ}$ (b)  $18^{o}$ (c)  $36^{\circ}$ (d)  $42^{o}$ How many sides does a Regular Polygon have if each of its interior angle is 165°? Q.24 (a) 15 (b) 24 (c) 36(d) 18 The \_\_\_\_\_\_ of a Rhombus are perpendicular bisectors of one another. Q.25 (a) Sides (b) Angles

(c) Diagonals

(d) Vertices