

INDIAN SCHOOL AL WADI AL KABIR

Class VI, Mathematics (2021-22)

Worksheet (DTQ)- Understanding Elementary Shapes

SHORT ANSWER TYPE QUESTIONS. (2 Marks each)

Q1.	Which direction will you face if you start facing (i) West and make 1 of a revolution clockwise? (ii) East and make one and half revolution?
Q2.	What part of a revolution have you turned through if you stand facing (i) North and turn clockwise to face east? (ii) South and turn anticlockwise to face west?
Q3.	Where will the hour hand of a clock stop if it starts: (i) from 7 and turns through 1 right angle? (ii) from 11 and turns through 3 right angles?
Q4.	What fraction of a clockwise revolution does the hour hand of a clock turn through, when it goes from (i) 6 to 12 (ii) 5 to 8
Q5.	Write two alphabets that are made of perpendicular lines.

LONG ANSWER TYPE (3 Marks)

Q6.	Fill in the blanks using appropriate signs (<, > or =) (i) The measure of one complete angle _____ 360° (ii) The measure of reflex angle _____ 180° (iii) The measure of an obtuse angle _____ 90° (iv) The measure of an acute angle _____ 90° (v) The measure of right angle _____ 90° (vi) The measure of straight angle _____ 90°
Q7.	Name the type of triangles based on given information: (i) 6.5 cm, 8cm, 8.5 cm (ii) 9 cm, 9 cm, 9 cm (iii) 30° , 60° , 90° (iv) 99° , 50° , 31° (v) 46° , 58° , 76° (vi) ΔABC with $\angle B=90^\circ$, $AB = BC = 6\text{cm}$
Q8.	How many right angles do you make if you start facing (a) south and turn clockwise to west? (b) north and turn anti-clockwise to east? (c) west and turn to west?

Q9.	Complete the following table with Yes or No: -						
	Quadrilateral	Opposite sides		All sides Equal	Opposite angle equal	Diagonals	
		Parallel	Equal			Equal	Perpendicular
	Parallelogram						
	Rectangle						
Square							

Q10. In which of the following figures:-
 (a) perpendicular bisector is shown?
 (b) bisector is shown?
 (c) only perpendicular is shown?

LONG ANSWER TYPE- (4 Marks)

Q11. Give two examples of each from your daily life: Cuboid, Cone, Cube, Cylinder, Sphere

Q12. In given Fig. 2.15, A, B, C, D and E are collinear such that $AB = BC = CD = DE$. Then

a) $AD = AB +$ _____
 b) $AD = AE -$ _____
 c) midpoint of AE is _____
 d) mid-point of CE is _____

Q13. Using the information given, name the right angles in each part of

(a) $BA \perp BD$ (b) $RT \perp ST$

(c) $AC \perp BD$ (d) $RS \perp RW$

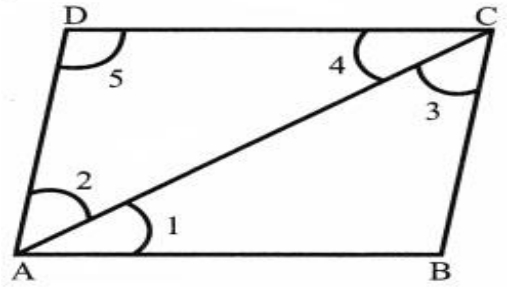
Q14. Name a polygon with number of sides as: -

• 9 _____	• 8 _____
• 5 _____	• 6 _____

Q15.

In the given figure:

- (a) Name the vertex of angle 3.
- (b) Give full names of angles 2 and 4.
- (c) Name the arms of angle 3.
- (d) Name the type of angle formed by angle 1 and 2.



ANSWERS

1. (i) West (ii) West	2. (i) $\frac{1}{4}$ (ii) $\frac{3}{4}$	3. (i) 10 (ii) 8	4. (i) $\frac{1}{2}$ (ii) $\frac{1}{4}$	5 – L, T etc.
6. (i) $_ = _ 360^\circ$ (ii) $_ > _ 180^\circ$ (iii) $_ > _ 90^\circ$ (iv) $_ < _ 90^\circ$ (v) $_ = _ 90^\circ$ (vi) $_ > _ 90^\circ$	7. (i) scalene (ii) equilateral (iii) right angled (iv) obtuse angled (v) acute angled (vi) isosceles right angled	8. (a) 1 (b) 3 (c) 4	9- Y Y N Y N N Y Y N Y Y N Y Y Y Y Y Y	10 (a) (ii) (b) (iii) (c) (i)
11-	12 a) $_ BD _$ a) $_ DE _$ b) $_ C _$ d) $_ D _$	13-(a) $\angle ABD$ (b) $\angle RTS$ (c) $\angle ACD$ or $\angle ACB$ (d) $\angle SRW$	14- 9- Nonagon 8- octagon 5- pentagon 6 - Hexagon	15 (a) C (b) 2- $\angle DAC$ and 4 - $\angle DCA$ (c) AC and CB (d) Acute angle