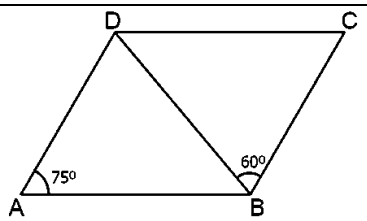
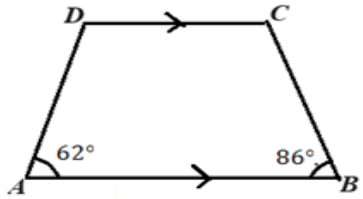
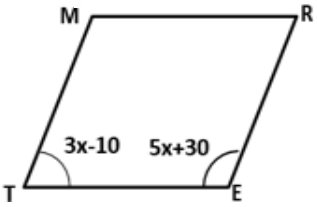
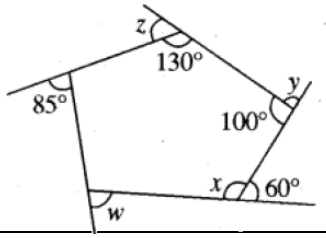
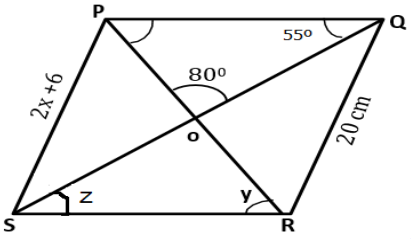
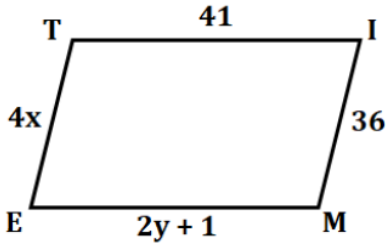
INDIAN SCHOOL AL WADI AL KABIR
Class VIII, Mathematics
WORKSHEET (2025-26)
UNDERSTANDING QUADRILATERALS

Multiple Choice Questions								
Q.1	In a parallelogram, its diagonals:							
	A	Are equal	B	Are perpendicular	C	Bisect each other	D	Equal and bisect each other
Q.2	The measure of each exterior angle of a regular hexagon is:							
	A	360º	B	60º	C	90º	D	270º
Q.3	Which of the following groups of angles are possible angles of a quadrilateral?							
	A	115º,155º,45º, 90º	B	60º,110º,60º, 190º	C	60º,70º,120º, 110º	D	90º,55º,80º, 125º
Q.4	A polygon with 10 sides has ---------- diagonals.							
	A	25	B	30	C	40	D	35
Q.5	A quadrilateral has three acute angles each measuring 73º. The measure of the fourth angle is:							
	A	141º	B	105º	C	150º	D	120º
Q.6	The measure of exterior angle of a regular polygon with 12 sides is:							
	A	30º	B	50º	C	15º	D	120º
Q.7	If PQRS is a parallelogram then $\angle P - \angle R$ is:							
	A	90º	B	0º	C	180º	D	360º
Q.8	If all the sides of a parallelogram are equal and the adjacent angles are 120º and 60º, then the quadrilateral is:							
	A	Rectangle	B	Square	C	Rhombus	D	Kite
Q.9	Name the quadrilateral whose diagonals are equal.							
	A	Trapezium	B	Kite	C	Rhombus	D	Rectangle
Q.10	Find the number of sides of a regular polygon each of its exterior angle has a measure of 45°.							
	A	5	B	6	C	7	D	8
	LONG ANSWER QUESTIONS:							
Q.11	Measure of one angle of a parallelogram is 80º. Find the other three angles.							

Q.12	In the figure ABCD is a parallelogram in which ∠BAD = 75º and ∠DBC = 60º. Then find ∠CDB. 
Q.13	If ABCD is a trapezium and AB ∥ CD $\angle DAB = 62°$ and $\angle ABC = 86°$, find the measrues of $\angle ADC$ and $\angle BCD$. 
Q.14	Find the values of x and y in the following parallelogram. 
Q.15	Find the value of x in the parallelogram TERM. 
Q.16	Find the values of x, y, z and w from the given figure. 
Q.17	In a parallelogram PQRS, PQ = 2x+7, QR = 4x-5, RS = 3x-8. Find the perimeter of the parallelogram.
Q.18	Two adjacent angles of a parallelogram are (3y + 10) º and (3y -4) º. Find the measure of all angles of the parallelogram.
Q.19	In figure, PQRS is a parallelogram and PS = 2x+6, RQ = 20cm. Find the values of x, y and z. 
Q.20	**<u>CASE STUDY:</u>** Diya has a parallelogram shaped lawn in back yard of her house. Observe the figure and answer the following questions. a) What will be the value of y. b) In the parallelogram ∠E:∠M = 2:3 then find the value of ∠E. c) Find the value of x from the figure. 

ANSWERS							
1.	C) Bisect each other	**2.**	B) 60º	**3.**	C) 60º,70º,120º,110º	**4.**	D) 35
5.	A) 141º	**6.**	A) 30º	**7.**	B) 0º	**8.**	C) Rhombus
9.	D) Rectangle	**10.**	D) 8	**11.**	100º, 80º,100º	**12.**	∠CDB= 45
13.	∠ADC = 118 ∠BCD = 94	**14.**	X =10, y=20	**15.**	20	**16.**	X=120, y=80, z=50, w=85
17.	184units	**18.**	97, 83,97,83	**19.**	x= 7, y= 45º, z= 55º	**20.**	y=20, ∠E= 72º, x =9