

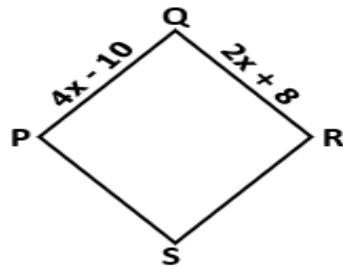
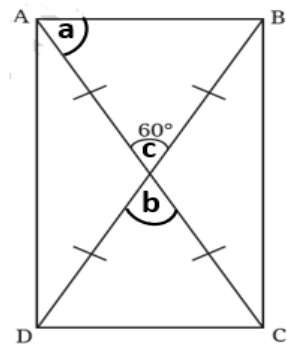
INDIAN SCHOOL AL WADI AL KABIR

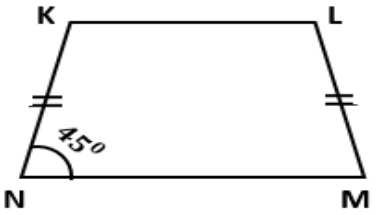
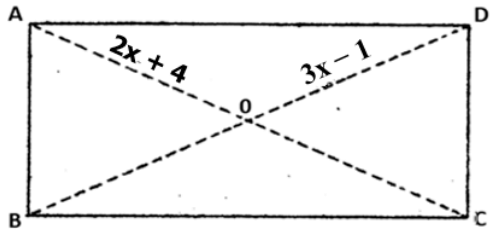
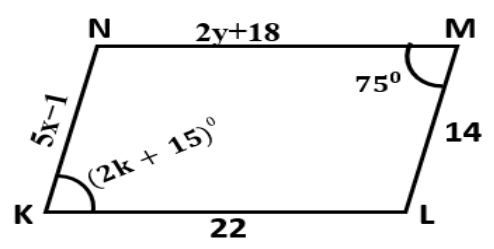
Class VIII, Mathematics

WORKSHEET (2026-27)

Quadrilaterals

Multiple Choice Questions

Q.1	If two adjacent angles of a parallelogram are in the ratio 2 : 3, what are their measures?							
	A	36° and 54°	B	72° and 108°	C	60° and 120°	D	80° and 100°
Q.2	Which of the following quadrilaterals has equal diagonals that bisect each other at right angles (90°)?							
	A	Parallelogram	B	Rectangle	C	Rhombus	D	Square
Q.3	The sum of all interior angles of any quadrilateral is equal to:							
	A	180°	B	90°	C	360°	D	120°
Q.4	In a parallelogram EFGH, if $\angle E = (3x - 5)^{\circ}$ and $\angle G = (2x + 15)^{\circ}$, find the value of x :							
	A	10	B	25	C	15	D	20
Q.5	In the rhombus PQRS shown above, side $PQ = (4x - 10)$ cm and side $QR = (2x + 8)$ cm. Find the length of one side and the perimeter of the rhombus.							
	A	18cm, 72cm	B	26cm, 104 cm	C	26 cm, 52 cm	D	9 cm, 36 cm
Q.6	In the adjoining rectangle, $\angle c = 60^{\circ}$, Find the value of a and b using properties of rectangles.							
	A	120° and 60°	B	180° and 120°	C	60° and 60°	D	60° and 90°
Q.7	Three angles of a quadrilateral are 70° , 90° and 120° . What is the measure of the fourth angle?							
	A	80°	B	100°	C	75°	D	60°

Q.8.	A quadrilateral having exactly one pair of parallel sides is called a:							
	A	Rhombus	B	Parallelogram	C	Trapezium	D	Kite
Q.9	If KLMN is an isosceles trapezium, $KL \parallel MN$ and $\angle KNM = 45^\circ$, find the measures of the remaining angles.							
	A	$135^\circ, 45^\circ, 135^\circ$	B	$35^\circ, 45^\circ, 125^\circ$	C	$125^\circ, 55^\circ, 45^\circ$	D	$120^\circ, 60^\circ, 120^\circ$
Q.10	In a rectangle ABCD, the diagonals AC and BD intersect at point O. If $OA = (2x + 4)$ and $OD = (3x - 1)$, what is the total length of diagonal AC?							
	A	28 cm	B	5 cm	C	14 cm	D	10 cm
Q.11	Four angles of a quadrilateral are in the ratio 1 : 2 : 3 : 4. What is the measure of the largest angle?							
	A	36°	B	72°	C	158°	D	144°
Q.12	In a rhombus ABCD, if one interior angle measures 50° , what is the measure of its adjacent interior angle?							
	A	50°	B	130°	C	90°	D	180°
Q.13	Case study: Designing a Modern Skylight Frame An architect is designing a decorative ceiling skylight frame in the shape of a parallelogram, labeled KLMN. To reinforce the structure and support glass panels, specific angles and side dimensions were chosen. Observe the adjoining figure and answer the following questions: a) Find the values of the variables x , y , and k . b) Find the measure of $\angle MNK$ using properties of parallelogram. c) Find the perimeter of the parallelogram.					 		

ANSWERS

1) B	2) D	3) C	4) D	5) B	6) C	7) A	8) C
9) A	10) A	11) D	12) B	13 a) $x=3, y=2, k=30^\circ$ b) $\angle MNK = 105^\circ$ c) $P=72$ units			