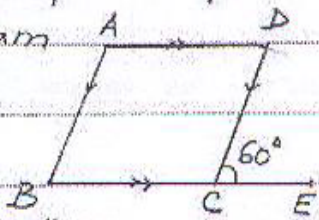
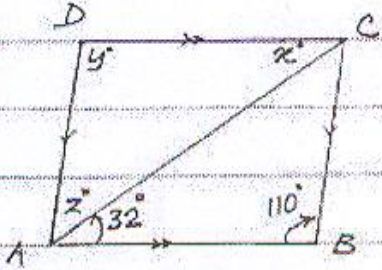




WORK SHEET

CLASS: 8th SUBJECT: Mathematics LESSON: Understanding Quadrilaterals
2011-12

- Three angles of a quadrilateral are 100° , 92° and 48° . Find the fourth angle.
- The four angles of a quadrilateral are in the ratio $3:4:5:6$. Find their measures.
- In a parallelogram ABCD, $\angle A = (3x - 10)^\circ$ and $\angle B = (5x + 30)^\circ$ find x and hence find all the angles of the parallelogram.
- In the figure, ABCD is a parallelogram. If $\angle DCE = 65^\circ$, find $\angle A$ and $\angle B$.

- ABCD is an isosceles trapezium with $AB \parallel DC$ and $AD = BC$. If $\angle A = 130^\circ$, find $\angle B$, $\angle C$ and $\angle D$.
- In a kite ABCD, $AB = AD$ and $BC = DC$. If $\angle A = 80^\circ$ and $\angle C = 40^\circ$, find $\angle B$ and $\angle D$.
- In the figure, ABCD is a parallelogram. If $\angle CAB = 32^\circ$, $\angle ABC = 110^\circ$ find x° , y° and z° .

- ABCD is a trapezium with $AD \parallel BC$. $\angle A = (3x + 1)^\circ$ and $\angle B = (2x + 4)^\circ$. Find x .
- In a trapezium ABCD, $AB \parallel DC$. If $\angle A : \angle D = 3:2$ and $\angle B : \angle C = 4:5$, find all the angles of the trapezium.

10. In a parallelogram PQRS, $\angle P$ is 30° more than $\angle Q$. Find the measures of all the angles.
11. The adjacent angles of a parallelogram are in the ratio 2:7. Find their measures.
12. P is a point in the interior of $\angle AOB$. $PM \perp OA$ and $PN \perp OB$. If $\angle AOB = 60^\circ$, find $\angle P$.
13. One of the diagonals of a rhombus is equal to one of its sides. Find the angles of the rhombus.
14. Find the perimeter of a rhombus whose diagonals are 6 cm and 8 cm.
15. Lengths of two sides of a parallelogram are in the ratio 2:3. Find the sides of the parallelogram if its perimeter = 120 cm.
16. Find the measure of an exterior angle of a regular
 i) Hexagon ii) Octagon iii) Decagon
17. Find the sum of the interior angles of a
 i) Heptagon ii) Nonagon iii) Pentagon
18. Each interior angle of a regular polygon is 140° . Find the number of sides of the polygon.
19. The measure of an exterior angle of a regular polygon is 72° . What is the name of the polygon?
20. Find the measure of an interior angle of a regular hexagon.
21. The ratio of an interior angle to the exterior angle of a regular polygon is 5:1. Find the number of sides.
22. The sum of the interior angles of a polygon is 540° . What is the name of the polygon?
23. How many diagonals can we draw in a
 i) pentagon
 ii) Hexagon iii) Triangle iv) Quadrilateral.

