

Octahedral classes, kharadi
2nd floor, yashwant plaza, near bank of India,

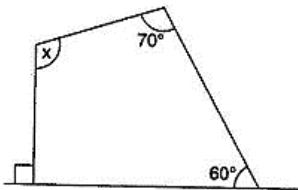
Class 08 - Mathematics
UNDERSTANDING QUADRILATERAL

Maximum Marks: 35

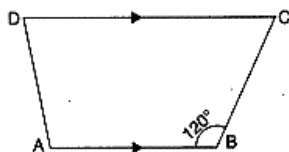
Time Allowed: 1 hour and 30 minutes

Section A

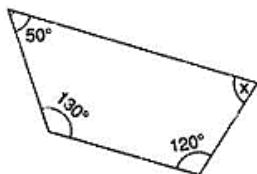
1. Explain how a square is 2
 - i. a quadrilateral
 - ii. a parallelogram
 - iii. a rhombus
2. Each interior angle of a regular polygon are 158° . Can it be an interior angle of a regular polygon? Why? 2
3. Find the angle measure x in the below figure. 2



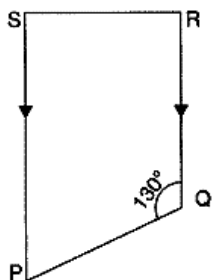
4. How many sides does a regular polygon have if each of its interior angles is 165° ? 2
5. How many sides does a regular polygon have if the measure of an exterior is 24° ? 2
6. Find $m\angle C$ in the figure. If $\overline{AB} \parallel \overline{DC}$. 2



7. How many diagonals does each of the following have? 2
 - a. A convex quadrilateral
 - b. A regular hexagon
 - c. A triangle.
8. Explain why a rectangle is a convex quadrilateral. 2
9. Find the \angle measure x in the following figure. 2



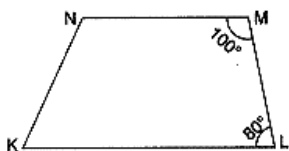
10. ABC is a right-angled triangle and O is the mid point of the side opposite to the right angle. Explain why O is equidistant from A, B and C. 2
11. Find the measure of $\angle P$ and $\angle S$. If $\overline{SP} \parallel \overline{RQ}$ in the figure. (If you find $m\angle R$, is there more than one method to find $m\angle P$?) 3



12. What is a regular polygon ? State the name of a regular polygon of 3
- 3 sides
 - 4 sides
 - 6 sides
13. Find the values of the unknowns x, y, z. 3



14. Explain how this figure is a trapezium. Which of its two sides are parallel? 3



15. Using the sum of exterior angles = 360° of a polygon find the measure of interior polygon of : 3
- a regular octagon
 - a regular 20-gon