

Class 9 Mathematics - I'm Up and Down, and Round and Round

Name: _____

Date: _____

Advanced Worksheet 1

Questions

1. In a circle with centre O, AB is a chord. If OM is perpendicular to AB and $AB = 16$ cm, find AM.
2. A chord PQ measures 20 cm. The perpendicular from the centre meets PQ at R. Find PR.
3. A chord XY measures 18 cm. The perpendicular from the centre bisects the chord. Find each half.
4. If the radius of a circle is 13 cm and the distance of a chord from the centre is 5 cm, find half the length of the chord.
5. Using the previous answer, find the full length of the chord.
6. State the theorem used in Questions 1–5.

Answer Key

1. 8 cm
2. 10 cm
3. 9 cm
4. 12 cm
5. 24 cm
6. The perpendicular from the centre of a circle to a chord bisects the chord.