Worksheet: Properties of Parallelograms

Q 1. Determine the area of the parallelogram ABCD if AB = 10 cm and the height corresponding to AB is 7 cm.

Q 2. If ∠P = 120° in the parallelogram PQRS, determine the measure of ∠Q.

Q 3. Determine the parallelogram's perimeter in WXYZ if WX = 15 cm and XY = 10 cm.

Q 4. Determine the length of AC in the parallelogram ABCD if the diagonals AC and BD cross at point O and AO = 6 cm.

Q 5. Determine the length of the diagonal of a rectangle, a particular kind of parallelogram, if its length is 20 cm and its width is 15 cm.

Q 6. If one diagonal in a rhombus, a different kind of parallelogram, is 12 cm long and each side is 10 cm, calculate the other diagonal length.

Q 7. If PQ = 4x - 5, QR = 3x + 2, and PQ = QR in the parallelogram PQRS, then determine the value of x.

Q 8. The value of x in the parallelogram ABCD is given by angles A = 4x + 15° and C = 2x + 25°.

Q 9. Calculate the area of the parallelogram WXYZ if the diagonals connect at a straight angle and have lengths of 10 and 14 cm.

Q 10. Determine the area of the parallelogram ABCD if the angles between AB and AD are 45° and AB and AD are 8 and 6 cm, respectively.