1) Which one of the following statements about a figure ABCD would always be true?
   A) If ABCD is a rectangle, then it must be a square.
   B) If ABCD is a quadrilateral, then it must be a parallelogram.
   C) If ABCD is a parallelogram, then it must be a quadrilateral.
   D) If ABCD is a parallelogram, then it must be a trapezoid.

2) Which one of the following statements is not true for any given parallelogram ABCD?
   A) m∠B + m∠C = 180°
   B) AB = DC
   C) m∠A = m∠C
   D) AC ⊥ DB

3) In which one of the following quadrilaterals are the diagonals always perpendicular?
   A) rectangle
   B) square
   C) parallelogram
   D) trapezoid

4) In the accompanying diagram, MINT is a rectangle and INTS is a square. If MT = 5 and TN = 14, find TN.

5) What is the length of a side of a square whose diagonal measures \(4\sqrt{2}\)?

6) In the accompanying diagram of trapezoid ABCD, AD \(\perp\) DC, AB = 6, DC = 9, and CB = 5. Find AD.

7) In the accompanying diagram, ABCD is an isosceles trapezoid, AD = BC = 5, AB = 10, and DC = 18. Find the length of altitude AE.

8) If the base of a rectangle is 8 and one diagonal is 10, what is the height of the rectangle?
9) Mrs. Thompson has a square garden that has been divided into nine congruent plots as shown in the diagram below.

She would like to cut a path through the garden as indicated by DE. If CE = 12 ft, what is the length of DE in simplest radical form?

10) The length of the diagonal of a square is 6. Find the length of a side of the square.

11) In the accompanying diagram, ABCD is a rectangle. If DB = 26 and DC = 24, find BC.

12) In quadrilateral ABCD, m∠A = 80°, m∠B = 2x°, m∠C = x°, and m∠D = 4x°. Find x.

13) In a parallelogram ABCD, m∠A = (2x)° and m∠B = (2x - 20)°. Find x.

14) In the accompanying diagram, ABCD is a parallelogram. DA = DE, and m∠B = 70°. Find m∠E.

5) The cross section of an attic is in the shape of an isosceles trapezoid, as shown in the accompanying figure.

If the height of the attic is 9 feet, BC = 12 feet, and AD = 28 feet, find the length of AB to the nearest foot.