1. 1. The vertices of a quadrilateral are A(0, 0), B(6, 0), C(10, 4), and D(4, 4). ABCD is a  
   (A) square  
   (B) rhombus  
   (C) rectangle  
   (D) parallelogram
2. 2. Let A(−2, 1), B(4, 3), C(6, −3), and D(0, −5). Then ABCD is a  
   (A) kite  
   (B) parallelogram  
   (C) square  
   (D) rectangle
3. 3. Points A(1, 2), B(5, 6), C(9, 2), and D(5, −2) form a quadrilateral. ABCD is a  
   (A) square  
   (B) rhombus  
   (C) rectangle  
   (D) parallelogram
4. 4. For A(−3, 1), B(1, 5), C(7, −1), and D(3, −5), determine the type of ABCD.  
   (A) square  
   (B) rhombus  
   (C) rectangle  
   (D) parallelogram
5. 5. Let A(0, 0), B(a, 3), C(a + 4, 3), and D(4, 0) with a ≠ 0. For which value(s) of a is ABCD a rectangle?  
   (A) a = 0  
   (B) a = −2  
   (C) a = 2  
   (D) a = 4
6. 6. Consider A(t, 2), B(6, 6), C(10, 2), and D(6, −2). For what value(s) of t is ABCD a square?  
   (A) t = 2  
   (B) t = 6  
   (C) t = −2  
   (D) no real t
7. 7. The points A(−1, 1), B(3, 5), C(7, 1), D(3, −3) define a quadrilateral. Which is true?  
   (A) It is a square  
   (B) It is a rhombus but not a square  
   (C) It is a rectangle but not a square  
   (D) It is a kite only
8. 8. Let A(0, 0), B(8, 0), C(10, 6), and D(2, 6). Classify ABCD.  
   (A) square  
   (B) rhombus  
   (C) rectangle  
   (D) parallelogram
9. 9. Given A(−4, 0), B(0, 4), C(6, 4), D(2, 0), identify ABCD.  
   (A) square  
   (B) rhombus  
   (C) rectangle  
   (D) isosceles trapezium (trapezoid)

10. For A(1, 3), B(5, 7), C(9, 3), and D(5, −1), the diagonals AC and BD are  
(A) equal and perpendicular  
(B) equal but not perpendicular  
(C) perpendicular but not equal  
(D) neither equal nor perpendicular