1. Which of the following are true?

   a) A rhombus is a square
   b) A square is a rhombus
   c) A rectangle is a square
   d) A parallelogram is a square
   e) A square is a rectangle

   (i) {b,e} (ii) {a,b} (iii) {d,a,b} (iv) {c,e,b} (v) {c,e}

2. Which of the following are true?

   a) A rectangle is a parallelogram
   b) A parallelogram is a rectangle
   c) A rectangle is a square
   d) A parallelogram is a square
   e) A square is a parallelogram

   (i) {b,a} (ii) {d,b,a} (iii) {c,e,a} (iv) {c,e} (v) {a,e}

3. Which of the following are true?

   a) A rhombus is a trapezium
   b) A trapezium is a parallelogram
   c) A rectangle is a square
   d) A parallelogram is a trapezium
   e) A trapezium is a rhombus

   (i) {c,d,a} (ii) {c,d} (iii) {b,a} (iv) {a,d} (v) {e,b,a}

4. Which of the following are true?

   a) A rhombus is a kite
   b) A rhombus is a parallelogram
   c) A trapezium is a parallelogram
   d) A kite is a rhombus
   e) A parallelogram is a rhombus

   (i) {c,a} (ii) {d,b,a} (iii) {d,b} (iv) {e,c,a} (v) {a,b}

5. Which of the following are true?

   a) A parallelogram is a rhombus
   b) A square is a trapezium
   c) A trapezium is a square
   d) A square is a rectangle
   e) A rectangle is a rhombus

   (i) {c,d} (ii) {b,d} (iii) {a,b} (iv) {c,d,b} (v) {e,a,b}

6. The quadrilateral whose diagonals are equal and are perpendicular bisectors is a

  (i) rhombus (ii) rectangle (iii) trapezium (iv) square (v) parallelogram

7. The diagonals do not divide the quadrilateral into congruent triangles in which figure?

  (i) rhombus (ii) rectangle (iii) square (iv) parallelogram (v) trapezium

8. Name all quadrilaterals whose diagonals are equal

  (i) rectangle,rhombus (ii) square,rectangle (iii) square,rhombus (iv) square,parallelogram (v) square,kite

9. Name all quadrilaterals whose diagonals bisect each other

  (i) square,kite (ii) rectangle,rhombus (iii) square,rectangle (iv) square,parallelogram

  (v) parallelogram,square,rhombus,rectangle

10. Name all quadrilaterals whose diagonals are perpendicular and bisect each other

  (i) square,parallelogram (ii) square,rhombus (iii) square,rectangle (iv) square,kite

  (v) parallelogram,square,rhombus,rectangle

11. Name all quadrilaterals whose opposite sides are equal

  (i) square,rectangle (ii) parallelogram,square,rhombus,rectangle (iii) square,kite (iv) square,rhombus

  (v) rectangle,rhombus

12. Name all quadrilaterals whose opposite sides are parallel

  (i) square,rectangle (ii) square,rhombus (iii) square,kite (iv) square,parallelogram

  (v) parallelogram,square,rhombus,rectangle

13. Name all quadrilaterals whose all sides are equal

  (i) square,rectangle (ii) square,kite (iii) square,rhombus (iv) square,parallelogram

  (v) parallelogram,square,rhombus,rectangle

14. Name all quadrilaterals whose all angles are right angles

  (i) square,rhombus (ii) rectangle,rhombus (iii) square,kite (iv) square,rectangle

  (v) parallelogram,square,rhombus,rectangle

15. Name all quadrilaterals whose opposite angles are equal

  (i) parallelogram,square,rhombus,rectangle (ii) square,rhombus (iii) square,kite (iv) square,parallelogram

  (v) square,rectangle

16. Name all quadrilaterals whose all angles are equal

  (i) square,rhombus (ii) square,rectangle (iii) square,kite (iv) rectangle,rhombus

  (v) parallelogram,square,rhombus,rectangle

17. Name all quadrilaterals whose adjacent angles are supplementary

  (i) rectangle,rhombus (ii) square,rectangle (iii) parallelogram,square,rhombus,rectangle

  (iv) square,parallelogram (v) square,kite

18. Which of the following is a regular polygon with four sides?

  (i) trapezium (ii) rhombus (iii) square (iv) rectangle (v) parallelogram

19. Which of the following statements are true?

a) All quadrilaterals are trapeziums
b) A parallelogram is a trapezium
c) All quadrilaterals are parallelograms
d) The set of parallelograms is a subset of the set of trapeziums
e) All trapeziums are parallelograms

(i) {b,d} (ii) {a,b} (iii) {e,a,b} (iv) {c,d,b} (v) {c,d}

20. The sum of the interior angles of a quadrilateral is

(i) 90° (ii) 360° (iii) 180° (iv) 270°

21. If ABCD is an isosceles trapezium, $\angle D$ =

(i) $\angle A$ (ii) $\angle B$ (iii) 90° (iv) $\angle C$

22. In which of the following are the diagonals equal ?

(i) rhombus (ii) trapezium (iii) None of these (iv) parallelogram (v) rectangle

23. If one of the angles of a rhombus is a right angle, it is a

(i) None of these (ii) parallelogram (iii) square (iv) rectangle (v) trapezium

24. If the two diagonals of a parallelogram are equal and right bisectors of each other, it is a

(i) square (ii) trapezium (iii) None of these (iv) rectangle (v) rhombus

25. JKLM is a rhombus in which $\angle J = 120°$.
$\overline{KM}$
is the diagonal. Then $\triangle JKL$ is

(i) an equilateral triangle (ii) None of these (iii) an isosceles triangle (iv) a scalene triangle

(v) an obtuse angled triangle

26. LMNO is a rhombus in which $\angle L = 105°$.
$\overline{MO}$
is the diagonal. Then $\triangle LMN$ is

(i) an obtuse angled triangle (ii) None of these (iii) an equilateral triangle (iv) a scalene triangle

(v) an isosceles triangle

27. Which of the following statements are true?

a) Every rectangle is a parallelogram
b) Every rhombus is parallelogram
c) Every square is a rectangle
d) Every parallelogram is a rectangle
e) Every rectangle is a rhombus

(i) {d,e,c} (ii) {e,b} (iii) {d,a} (iv) {d,a,b} (v) {a,b,c}

28. Which of the following statements are true?

   a) A parallelogram is a rhombus
   b) A rhombus is a square
   c) A trapezium is a parallelogram
   d) A rectangle is a parallelogram
   e) A parallelogram is a trapezium
   f) A square is a rectangle
   g) A square is a rhombus

   (i) {b,e} (ii) {d,e,f,g} (iii) {a,d} (iv) {c,a,f} (v) {b,g,d}

29. Every rhombus is a

   a) square
   b) trapezium
   c) triangle
   d) parallelogram
   e) rectangle

   (i) {a,b} (ii) {e,a,b} (iii) {c,d,b} (iv) {c,d} (v) {b,d}

30. The diagonals are equal in a

   a) trapezium
   b) square
   c) parallelogram
   d) rectangle
   e) rhombus

   (i) {c,d,b} (ii) {a,b} (iii) {b,d} (iv) {e,a,b} (v) {c,d}

31. Which of the following statements are true?

   a) In a parallelogram, adjacent angles are complementary
   b) In a parallelogram, both adjacent angles can be obtuse
   c) In a parallelogram, adjacent angles are supplementary
   d) In a parallelogram, both adjacent angles can be acute
   e) In a parallelogram, both adjacent angles can be right angles

   (i) {b,e,c} (ii) {a,c} (iii) {d,a,c} (iv) {b,e} (v) {c,e}

32. Which of the following properties apply for a parallelogram ?

   a) Adjacent angles are supplementary
   b) Opposite sides are equal
   c) Opposite angles are equal
   d) Diagonals are equal to each other
   e) Diagonals are perpendicular to each other
   f) Diagonals bisect each other

   (i) {d,f,a} (ii) {d,a} (iii) {a,b,c,f} (iv) {d,e,c} (v) {e,b}

33. Which of the following properties apply for a trapezium ?

   (i) One pair of opposite sides are parallel (ii) Diagonals are equal

   (iii) Diagonals are perpendicular to each other (iv) Diagonals bisect each other

   (v) Adjacent angles are supplementary

34. Which of the following properties apply for a kite ?

    (i) Diagonals are perpendicular (ii) Diagonals are equal (iii) Opposite angles are parallel

    (iv) Opposite sides are equal (v) Adjacent angles are equal

35. Which of the following properties apply for a rhombus ?

    a) Diagonals bisect each other
    b) Opposite sides are parallel
    c) Adjacent sides are equal
    d) Opposite angles are equal
    e) Diagonals are equal
    f) Adjacent angles are equal
    g) Opposite sides are equal

    (i) {e,a} (ii) {e,d,g} (iii) {f,b} (iv) {a,b,c,d,g} (v) {e,f,c}

36. Which of the following properties apply for a rectangle ?

    a) Diagonals are equal
    b) Opposite sides are equal
    c) Adjacent angles are equal
    d) Opposite angles are equal
    e) Adjacent sides are equal
    f) Opposite sides are parallel
    g) Diagonals bisect each other

    (i) {e,a} (ii) {a,b,c,d,f,g} (iii) {e,d,f} (iv) {e,c} (v) {e,b}

37. Which of the following statements are true?

    a) Every rhombus is a parallelogram
    b) Every rectangle is a rhombus
    c) Every square is a rhombus
    d) Every parallelogram is a trapezium
    e) Every rectangle is a parallelogram
    f) Every parallelogram is a rectangle
    g) Every square is a rectangle

    (i) {a,c,d,e,g} (ii) {b,a} (iii) {b,e,g} (iv) {b,f,d} (v) {f,c}

Assignment Key

1) (i)	2) (v)	3) (iv)	4) (v)	5) (ii)	6) (iv)
7) (v)	8) (ii)	9) (v)	10) (ii)	11) (ii)	12) (v)
13) (iii)	14) (iv)	15) (i)	16) (ii)	17) (iii)	18) (iii)
19) (i)	20) (ii)	21) (iv)	22) (v)	23) (iii)	24) (i)
25) (i)	26) (v)	27) (v)	28) (ii)	29) (v)	30) (iii)
31) (v)	32) (iii)	33) (i)	34) (i)	35) (iv)	36) (ii)
37) (i)					