EduSahara™ Assignment

Name : Quadrilateral Properties

Chapter : Quadrilaterals

Grade : ICSE Grade VIII

1. Which of the following statements are true?

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

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

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

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

3. If ABCD is an isosceles trapezium, ∠D =

   (i) ∠A (ii) 90° (iii) ∠C (iv) ∠B

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

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

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

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

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

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

7. DEFG is a rhombus in which ∠D = 120° .
   $\overline{EG}$
   is the diagonal. Then △DEF is

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

8. PQRS is a rhombus in which ∠P = 95° .
   $\overline{QS}$
   is the diagonal. Then △PQR is

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

9. Which of the following statements are true?

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

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

10. Which of the following have point symmetry ?

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

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

11. Which of the following statements are true?

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

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

12. Every rhombus is a

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

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

13. The diagonals are equal in a

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

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

14. Sum of the interior angles in a quadrilateral is

(i) 370° (ii) 390° (iii) 365° (iv) 375° (v) 360°

15. How many diagonals does a quadrilateral have?

(i) 0 (ii) 4 (iii) 3 (iv) 2 (v) 1

16. Which of the following are true?

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

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

17. Which of the following are true?

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

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

18. Which of the following are true?

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

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

19. Which of the following are true?

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

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

20. Which of the following are true?

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

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

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

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

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

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

23. Name all quadrilaterals whose diagonals are equal

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

24. Name all quadrilaterals whose diagonals bisect each other

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

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

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

26. Name all quadrilaterals whose opposite sides are equal

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

(v) rectangle,rhombus

27. Name all quadrilaterals whose opposite sides are parallel

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

(v) square,parallelogram

28. Name all quadrilaterals whose all sides are equal

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

(v) parallelogram,square,rhombus,rectangle

29. Name all quadrilaterals whose all angles are right angles

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

30. Name all quadrilaterals whose opposite angles are equal

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

(iv) square,rhombus (v) rectangle,rhombus

31. Name all quadrilaterals whose all angles are equal

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

32. Name all quadrilaterals whose adjacent angles are supplementary

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

(iv) square,rectangle (v) square,kite

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

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

34. Which of the following statements are true?

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

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

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

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

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

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

(i) One pair of opposite sides are parallel (ii) Diagonals are perpendicular to each other

(iii) Diagonals bisect each other (iv) Both adjacent angles are obtuse (v) Diagonals are equal

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

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

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

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

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

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

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

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

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

40. Which of the following statements are true?

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

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

41. The figure formed by successively joining the mid-points of the sides of a parallelogram is

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

42. The figure formed by successively joining the mid-points of the sides of a rectangle is

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

43. The figure formed by successively joining the mid-points of the sides of a rhombus is

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

Assignment Key

1) (i)	2) (iii)	3) (iii)	4) (ii)	5) (ii)	6) (iv)
7) (iii)	8) (iii)	9) (iii)	10) (i)	11) (i)	12) (i)
13) (i)	14) (v)	15) (iv)	16) (ii)	17) (ii)	18) (v)
19) (v)	20) (iv)	21) (iv)	22) (iv)	23) (v)	24) (ii)
25) (iii)	26) (i)	27) (ii)	28) (ii)	29) (iii)	30) (iii)
31) (i)	32) (iii)	33) (v)	34) (ii)	35) (iv)	36) (i)
37) (ii)	38) (iv)	39) (ii)	40) (ii)	41) (ii)	42) (iv)
43) (iv)					