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

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

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

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

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

(i) 90° (ii) ∠C (iii) ∠B (iv) ∠A

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

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

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

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

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

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

7. NOPQ is a rhombus in which ∠N = 120° . $\overline{OQ}$ is the diagonal. Then △NOP is

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

8. FGHI is a rhombus in which ∠F = 110° . $\overline{GI}$ is the diagonal. Then △FGH is

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

9. Which of the following statements are true?

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

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

10. Which of the following have point symmetry ?

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

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

11. Which of the following statements are true?

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

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

12. Every rhombus is a

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

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

13. The diagonals are equal in a

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

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

14. Sum of the interior angles in a quadrilateral is

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

15. How many diagonals does a quadrilateral have?

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

16. Which of the following are true?

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

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

17. Which of the following are true?

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

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

18. Which of the following are true?

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

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

19. Which of the following are true?

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

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

20. Which of the following are true?

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

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

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

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

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

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

23. Name all quadrilaterals whose diagonals are equal

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

(v) parallelogram,square,rhombus,rectangle

24. Name all quadrilaterals whose diagonals bisect each other

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

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

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

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

(iv) square,parallelogram (v) square,rectangle

26. Name all quadrilaterals whose opposite sides are equal

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

(v) rectangle,rhombus

27. Name all quadrilaterals whose opposite sides are parallel

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

(v) parallelogram,square,rhombus,rectangle

28. Name all quadrilaterals whose all sides are equal

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

(v) square,rectangle

29. Name all quadrilaterals whose all angles are right angles

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

(iv) square,parallelogram (v) square,rectangle

30. Name all quadrilaterals whose opposite angles are equal

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

(v) parallelogram,square,rhombus,rectangle

31. Name all quadrilaterals whose all angles are equal

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

(v) square,parallelogram

32. Name all quadrilaterals whose adjacent angles are supplementary

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

(v) parallelogram,square,rhombus,rectangle

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

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

34. Which of the following statements are true?

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

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

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

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

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

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

(i) One pair of opposite sides are parallel (ii) Both adjacent angles are obtuse

(iii) Diagonals bisect each other (iv) Diagonals are equal (v) Adjacent angles are supplementary

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) All Adjacent sides are equal (v) Opposite sides are equal

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

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

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

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

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

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

40. Which of the following statements are true?

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

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

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

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

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

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

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

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

Assignment Key

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