Name: Quadrilateral Properties

Chapter : Quadrilaterals

Grade: SSC Grade VII

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 Which of the following are true 	?	,
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- a) A square is a rectangle
- b) A rectangle is a square
- c) A square is a rhombus
- d) A rhombus is a square
- e) A parallelogram is a square
- (i) $\{b,a\}$ (ii) $\{a,c\}$ (iii) $\{e,b,a\}$ (iv) $\{d,c,a\}$ (v) $\{d,c\}$

2. Which of the following are true?

- a) A rectangle is a square
- b) A parallelogram is a rectangle
- c) A rectangle is a parallelogram
- d) A parallelogram is a square
- e) A square is a parallelogram
- (i) {c,e} (ii) {a,c} (iii) {d,a,c} (iv) {b,e} (v) {b,e,c}

3. Which of the following are true?

- a) A rectangle is a square
- b) A trapezium is a rhombus
- c) A rhombus is a trapezium
- d) A parallelogram is a trapezium
- e) A trapezium is a parallelogram
- (i) $\{e,a,c\}$ (ii) $\{b,d,c\}$ (iii) $\{c,d\}$ (iv) $\{b,d\}$ (v) $\{a,c\}$

4. Which of the following are true?

- a) A rhombus is a parallelogram
- b) A parallelogram is a rhombus
- c) A kite is a rhombus
- d) A trapezium is a parallelogram
- e) A rhombus is a kite
- (i) {b,a} (ii) {d,b,a} (iii) {c,e} (iv) {a,e} (v) {c,e,a}

5. Which of the following are true?

- a) A square is a rectangle
- b) A trapezium is a square
- c) A square is a trapezium
- d) A parallelogram is a rhombus
- e) A rectangle is a rhombus
- (i) $\{e,b,a\}$ (ii) $\{a,c\}$ (iii) $\{d,c\}$ (iv) $\{b,a\}$ (v) $\{d,c,a\}$

6. The quadrilateral whose diagonals are equal and are perpendicular bisectors is a (i) parallelogram (ii) square (iii) trapezium (iv) rectangle (v) rhombus	
7. The diagonals do not divide the quadrilateral into congruent triangles in which figure? (i) parallelogram (ii) rectangle (iii) square (iv) rhombus (v) trapezium	
8. Name all quadrilaterals whose diagonals are equal (i) square,rhombus (ii) rectangle,rhombus (iii) square,rectangle (iv) square,parallelogram (v) square,kite	
 Name all quadrilaterals whose diagonals bisect each other (i) rectangle,rhombus (ii) square,parallelogram (iii) square,rectangle (iv) parallelogram,square,rhombus,rectangle (v) square,rhombus 	
10. Name all quadrilaterals whose diagonals are perpendicular and bisect each other(i) square,rectangle (ii) square,rhombus (iii) rectangle,rhombus (iv) square,kite (v) square,parallelogram	
11. Name all quadrilaterals whose opposite sides are equal(i) parallelogram, square, rhombus, rectangle (ii) rectangle, rhombus (iii) square, rhombus(iv) square, rectangle (v) square, parallelogram	
12. Name all quadrilaterals whose opposite sides are parallel(i) parallelogram, square, rhombus, rectangle (ii) rectangle, rhombus (iii) square, rectangle(iv) square, rhombus (v) square, parallelogram	
13. Name all quadrilaterals whose all sides are equal(i) square,parallelogram (ii) rectangle,rhombus (iii) square,kite (iv) square,rhombus(v) parallelogram,square,rhombus,rectangle	
14. Name all quadrilaterals whose all angles are right angles(i) square,kite (ii) square,rhombus (iii) square,parallelogram (iv) parallelogram,square,rhombus,rectangle(v) square,rectangle	
15. Name all quadrilaterals whose opposite angles are equal(i) square,kite (ii) square,parallelogram (iii) rectangle,rhombus (iv) square,rectangle(v) parallelogram,square,rhombus,rectangle	
16. Name all quadrilaterals whose all angles are equal(i) square,parallelogram (ii) parallelogram,square,rhombus,rectangle (iii) square,kite (iv) square,rectangle(v) rectangle,rhombus	
17. Name all quadrilaterals whose adjacent angles are supplementary(i) parallelogram, square, rhombus, rectangle (ii) square, rhombus (iii) square, parallelogram (iv) square, kite(v) rectangle, rhombus	
18. Which of the following is a regular polygon with four sides? (i) trapezium (ii) square (iii) parallelogram (iv) rhombus (v) rectangle	

19.	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) {d,a,c} (ii) {a,c} (iii) {b,e,c} (iv) {b,e} (v) {c,e}
20.	The sum of the interior angles of a quadrilateral is (i) 270° (ii) 90° (iii) 180° (iv) 360°
21.	If ABCD is an isosceles trapezium, $\angle D =$ (i) $\angle B$ (ii) 90° (iii) $\angle C$ (iv) $\angle A$
22.	In which of the following are the diagonals equal ? (i) rectangle (ii) rhombus (iii) trapezium (iv) None of these (v) parallelogram
23.	If one of the angles of a rhombus is a right angle, it is a (i) None of these (ii) parallelogram (iii) rectangle (iv) square (v) trapezium
24.	If the two diagonals of a parallelogram are equal and right bisectors of each other, it is a (i) trapezium (ii) None of these (iii) square (iv) rectangle (v) rhombus
25.	DEFG is a rhombus in which $\angle D=120^\circ$. \overline{EG} is the diagonal. Then $\triangle DEF$ is (i) a scalene triangle (ii) an equilateral triangle (iii) an isosceles triangle (iv) None of these (v) an obtuse angled triangle
	EG is the diagonal. Then △DEF is (i) a scalene triangle (ii) an equilateral triangle (iii) an isosceles triangle (iv) None of these
26.	

a) A square is a rectangle b) A trapezium is a parallelogram c) A rectangle is a parallelogram d) A parallelogram is a rhombus e) A square is a rhombus f) A parallelogram is a trapezium g) A rhombus is a square (i) (b,a) (ii) {d,f,a) (iii) {g,b,e} (iv) {a,c,e,f} (v) {d,c} 29. Every rhombus is a a) trapezium b) rectangle c) square d) triangle e) parallelogram (i) {c,e} (iii) {c,e,a} (iiii) {b,a} (iv) {a,e} (v) {d,b,a} 30. The diagonals are equal in a a) trapezium b) parallelogram c) rhombus d) square e) rectangle (ii) {b,e} (iii) {d,e} (iiii) {a,d} (iv) {b,e,d} (v) {c,a,d} 31. Which of the following statements are true? a) In a parallelogram, both adjacent angles are supplementary d) In a parallelogram, adjacent angles are complementary e) In a parallelogram, adjacent angles are supplementary e) In a parallelogram, adjacent angles are complementary e) In a parallelogram, adjacent angles are supplementary e) In a parallelogram, adjacent angles are supplementary e) In a parallelogram, adjacent angles are supplementary e) In a parallelogram and pacent angles are supplementary e) In a parallelogram and pacent angles are supplementary e) In a parallelogram and pacent angles are supplementary e) In a parallelogram and pacent angles are supplementary e) In a parallelogram and pacent angles are supplementary e) In a parallelogram and pacent angles are supplementary e) In a parallelogram and pacent angles are supplementary e) In a parallelogram are equal f) Diagonals bisect each other e) Opposite angles are equal f) Diagonals are equal to each other e) Opposite angles are equal f) Diagonals are equal to each other e) Opposite angles are equal f) Diagonals are equal to each other e) Opposite angles are equal f) Diagonals bisect each other e) Opposite sides are equal f) Diagonals bisect each other e) Opposite sides are equal f) Diagonals are equal to each other e) Opposite sides are equal f) Diagonals bisect each other (ii) Adjacent angles are equalled (v) Diagonals are equal	28.	Which of the following statements are true?
29. Every rhombus is a a) trapezium b) rectangle c) square d) triangle e) parallelogram (i) {c,e} (ii) {c,e,a} (iii) {b,a} (iv) {a,e} (v) {d,b,a} 30. The diagonals are equal in a a) trapezium b) parallelogram c) rhombus d) square e) rectangle (i) {b,e} (ii) {d,e} (iii) {a,d} (iv) {b,e,d} (v) {c,a,d} 31. Which of the following statements are true? a) In a parallelogram, both adjacent angles can be acute 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 right angles (i) {a,c} (ii) {d,a,c} (iii) {b,e} (iv) {b,e,c} (v) {c,e} 32. Which of the following properties apply for a parallelogram? a) Diagonals bisect each other b) Adjacent angles are supplementary c) Opposite sides are equal d) Diagonals are perpendicular to each other e) Opposite angles are equal f) Diagonals are equal to each other e) Opposite angles are equal f) Diagonals are equal to each other e) Opposite angles are equal f) Diagonals are perpendicular to each other e) Opposite angles are equal f) Diagonals are equal to each other e) Opposite angles are equal f) Diagonals are perpendicular to each other e) Opposite angles are equal f) Diagonals are equal to each other e) Opposite angles are equal f) Diagonals are equal to each other e) Opposite angles are equal f) Diagonals are equal to each other e) Opposite angles are equal f) Diagonals are equal to each other e) Opposite angles are equal f) Diagonals bisect each other e) Diagonals bisect each other e) Opposite angles are equal f) Diagonals bisect each other e) Opposite angles are equal f) Diagonals bisect each other e) Diagonals bisect each other e) Opposite angles are equal f) Diagonals bisect each other e) Opposite angles are equal f) Diagonals bisect each other e) Opposite angles are equal f) Diagonals bisect each other		 b) A trapezium is a parallelogram c) A rectangle is a parallelogram d) A parallelogram is a rhombus e) A square is a rhombus f) A parallelogram is a trapezium
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30. The diagonals are equal in a a) trapezium b) parallelogram c) rhombus d) square e) rectangle (i) {b,e} (ii) {d.e} (iii) {a.d} (iv) {b.e.d} (v) {c.a.d} 31. Which of the following statements are true? a) In a parallelogram, both adjacent angles can be acute b) In a parallelogram, both adjacent angles can be obtuse c) In a parallelogram, adjacent angles are supplementary d) In a parallelogram, adjacent angles are complementary e) In a parallelogram, both adjacent angles can be right angles (i) {a,c} (ii) {d,a,c} (iii) {b,e} (iv) {b,e,c} (v) {c,e} 32. Which of the following properties apply for a parallelogram? a) Diagonals bisect each other b) Adjacent angles are supplementary c) Opposite angles are equal d) Diagonals are perpendicular to each other e) Opposite angles are equal f) Diagonals are equal to each other (i) {d,f,c} (ii) {f,b} (iii) {d,a} (iv) {d,e,a} (v) {a,b,c,e} 33. Which of the following properties apply for a trapezium? (i) Diagonals bisect each other (ii) Adjacent angles are supplementary (iii) Both adjacent angles are obtuse		b) rectangle c) square d) triangle e) parallelogram
a) trapezium b) parallelogram c) rhombus d) square e) rectangle (i) {b,e} (ii) {d.e} (iii) {a,d} (iv) {b,e,d} (v) {c,a,d} 31. Which of the following statements are true? a) In a parallelogram, both adjacent angles can be acute b) In a parallelogram, both adjacent angles can be obtuse c) In a parallelogram, adjacent angles are supplementary d) In a parallelogram, adjacent angles are supplementary e) In a parallelogram, both adjacent angles can be right angles (i) {a,c} (ii) {d,a,c} (iii) {b,e} (iv) {b,e,c} (v) {c,e} 32. Which of the following properties apply for a parallelogram? a) Diagonals bisect each other b) Adjacent angles are supplementary c) Opposite sides are equal d) Diagonals are perpendicular to each other e) Opposite angles are equal f) Diagonals are equal to each other (i) {d,f,c} (ii) {f,b} (iii) {d,a} (iv) {d,e,a} (v) {a,b,c,e} 33. Which of the following properties apply for a trapezium? (i) Diagonals bisect each other (ii) Adjacent angles are supplementary (iii) Both adjacent angles are obtuse		
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b) In a parallelogram, both adjacent angles can be obtuse c) In a parallelogram, adjacent angles are supplementary d) In a parallelogram, adjacent angles are complementary e) In a parallelogram, both adjacent angles can be right angles (i) {a,c} (ii) {d,a,c} (iii) {b,e} (iv) {b,e,c} (v) {c,e} 32. Which of the following properties apply for a parallelogram? a) Diagonals bisect each other b) Adjacent angles are supplementary c) Opposite sides are equal d) Diagonals are perpendicular to each other e) Opposite angles are equal f) Diagonals are equal to each other (i) {d,f,c} (ii) {f,b} (iii) {d,a} (iv) {d,e,a} (v) {a,b,c,e} 33. Which of the following properties apply for a trapezium? (i) Diagonals bisect each other (ii) Adjacent angles are supplementary (iii) Both adjacent angles are obtuse	31.	Which of the following statements are true?
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(i) Diagonals bisect each other (ii) Adjacent angles are supplementary (iii) Both adjacent angles are obtuse		b) Adjacent angles are supplementary c) Opposite sides are equal d) Diagonals are perpendicular to each other e) Opposite angles are equal f) Diagonals are equal to each other
	33.	(i) Diagonals bisect each other (ii) Adjacent angles are supplementary (iii) Both adjacent angles are obtuse

	(i) Opposite sides are equal (ii) Diagonals are perpendicular (iii) Opposite sides are parallel
	(iv) All Adjacent sides are equal (v) Opposite angles are parallel
35.	Which of the following properties apply for a rhombus ?
	a) Adjacent sides are equal
	b) Diagonals are equal
	c) Diagonals bisect each other
	d) Opposite sides are equal e) Opposite angles are equal
	f) Opposite sides are parallel
	g) Adjacent angles are equal
	(i) {b,a} (ii) {b,e,f} (iii) {a,c,d,e,f} (iv) {g,c} (v) {b,g,d}
36.	Which of the following properties apply for a rectangle ?
	a) Diagonals are equal
	b) Opposite angles are equal
	c) Adjacent sides are equal
	d) Opposite sides are parallel e) Adjacent angles are equal
	f) Opposite sides are equal
	g) Diagonals bisect each other
	(i) {a,b,d,e,f,g} (ii) {c,b} (iii) {c,d} (iv) {c,a} (v) {c,e,f}
37.	Which of the following statements are true?
	a) Every square is a rhombus
	b) Every parallelogram is a trapezium
	c) Every square is a rectangle
	d) Every rhombus is a parallelogram e) Every parallelogram is a rectangle
	f) Every rectangle is a rhombus
	g) Every rectangle is a parallelogram
	(i) {f,b} (ii) {e,f,c} (iii) {e,d,g} (iv) {e,a} (v) {a,b,c,d,g}

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

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

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