EduSahara™ Learning Center Assignment

Grade : Class IX, SSC
Chapter : Quadrilaterals
Name : Quadrilateral Properties

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

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

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2. Which of the following statements are true?

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

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

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3. Which of the following statements are true?

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

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

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4. Which of the following statements are true?

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

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

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5. Every rhombus is a

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

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

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6. The diagonals are equal in a

a) parallelogram
b) square
c) trapezium

d) rectangle
e) rhombus

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

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7. Sum of the interior angles in a quadrilateral is

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

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8. How many diagonals does a quadrilateral have?

(i) 0 (ii) 5 (iii) 2 (iv) 3 (v) 1

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9. Which of the following are true?

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

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

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10. Which of the following are true?

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

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

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11. 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 trapezium is a rhombus
e) A parallelogram is a trapezium

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

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12. Which of the following are true?

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

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

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13. Which of the following are true?

a) A square is a rectangle
b) A square is a trapezium
c) A rectangle is a rhombus

d) A parallelogram is a rhombus

e) A trapezium is a square

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

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

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

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

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

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16. Name all quadrilaterals whose diagonals are equal

(i) square,kite

(ii) square,rectangle

(iii) square,rhombus

(iv) parallelogram,square,rhombus,rectangle

(v) square,parallelogram

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17. Name all quadrilaterals whose diagonals bisect each other

(i) square,kite

(ii) parallelogram,square,rhombus,rectangle

(iii) square,rectangle

(iv) square,parallelogram

(v) rectangle,rhombus

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

(i) square,rhombus

(ii) square,parallelogram

(iii) square,kite

(iv) rectangle,rhombus

(v) parallelogram,square,rhombus,rectangle

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19. Name all quadrilaterals whose opposite sides are equal

(i) square,parallelogram

(ii) square,rhombus

(iii) square,kite

(iv) rectangle,rhombus

(v) parallelogram,square,rhombus,rectangle

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20. Name all quadrilaterals whose opposite sides are parallel

(i) square,parallelogram

(ii) square,rectangle

(iii) parallelogram,square,rhombus,rectangle

(iv) square,rhombus

(v) rectangle,rhombus

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21. Name all quadrilaterals whose all sides are equal

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

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22. Name all quadrilaterals whose all angles are right angles

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

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23. Name all quadrilaterals whose opposite angles are equal

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

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24. Name all quadrilaterals whose all angles are equal

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

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25. Name all quadrilaterals whose adjacent angles are supplementary

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

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

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

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

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

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

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

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29. Which of the following have point symmetry ?

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

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

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30. Which of the following statements are true?

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

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

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

a) Diagonals bisect each other
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) Adjacent angles are supplementary

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

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

(i) Diagonals are equal
(ii) One pair of opposite sides are parallel
(iii) Diagonals bisect each other
(iv) Both adjacent angles are obtuse
(v) Adjacent angles are supplementary

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

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

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

a) Opposite sides are equal
b) Adjacent sides are equal
c) Diagonals are equal
d) Opposite angles are equal
e) Adjacent angles are equal
f) Opposite sides are parallel

g) Diagonals bisect each other

(i) {e,b}

(ii) {c,a}

(iii) {a,b,d,f,g}

(iv) {c,e,d}

(v) {c,f,g}

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

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

(i) {a,b,c,d,e,f}

(ii) {g,d,e}

(iii) {g,c}

(iv) {g,a}

(v) {g,b}

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36. Which of the following statements are true?

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

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

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

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

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

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

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

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

Assignment Key

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