

# Geometry :Shapes (Quadrilaterals)

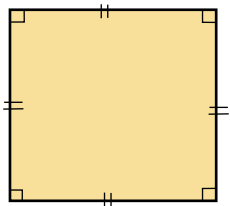
## Notes

Quadrilaterals are those shapes which has

- ⌘ **FOUR** sides.
- ⌘ They have **closed points**.
- ⌘ They are **2D shapes**.
- ⌘ All **sides are straight**.

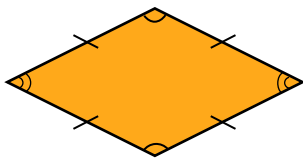
### Characteristics

Square



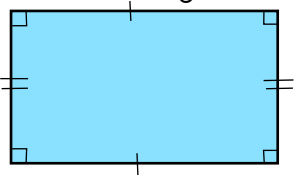
- ⌘ It has **Four Equal sides**.
- ⌘ It has **Four Equal angles: Right angle**.
- ⌘ **Opposite sides are parallel**.

Rhombus



- ⌘ It has **Four Equal sides**.
- ⌘ It has ~~Four Equal angles: Right angle~~.
- ⌘ **Opposite sides are parallel**.
- ⌘ **Opposite angles are equal**.
- ⌘ **A square can be rhombus but a rhombus can NOT be square.**

Rectangle



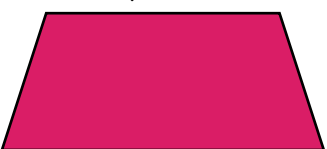
- ⌘ The **two opposite sides are equal**.
- ⌘ It has **Four Equal angles: Right angle**.
- ⌘ **Opposite sides are parallel**.

Parallelogram



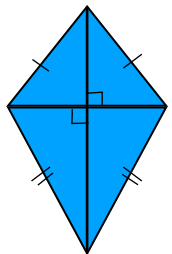
- ⌘ The **two opposite sides are equal**.
- ⌘ It has ~~Four Equal angles: Right angle~~.
- ⌘ **Opposite sides are parallel**.
- ⌘ **Opposite angles are equal**.

Trapezoid



- ⌘ has **exactly one pair** of parallel sides.
- ⌘ It is a quadrilateral that is **not a parallelogram**.

Kite



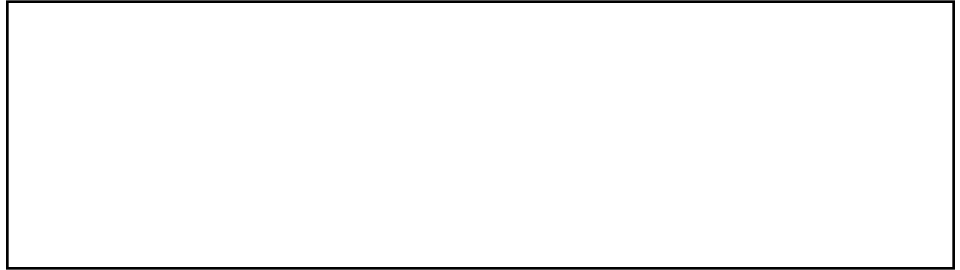
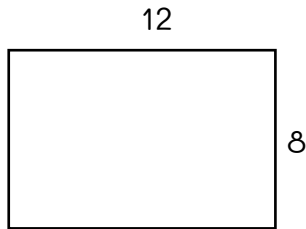
- ⌘ Two pairs of **adjacent sides are equal** (Congruent).
- ⌘ One pair of **opposite angles are equal**.
- ⌘ The **diagonals of a kite are perpendicular** to each other.
- ⌘ It is a quadrilateral that is not a parallelogram.

Name: \_\_\_\_\_

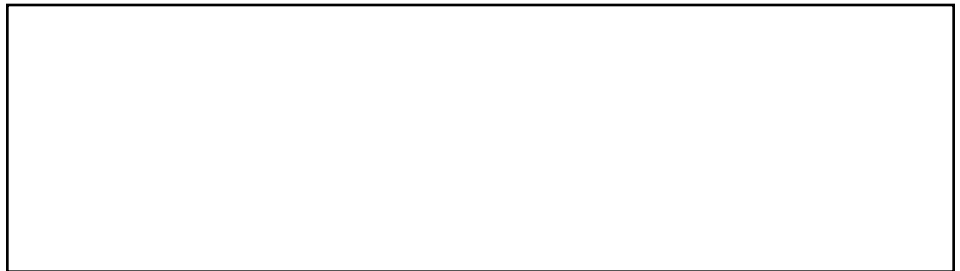
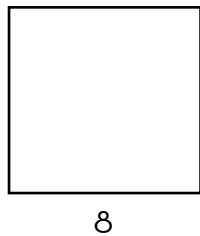
Date: \_\_\_\_\_

## Geometry :Shapes (Quadrilaterals)

Find out the area of rectangle.

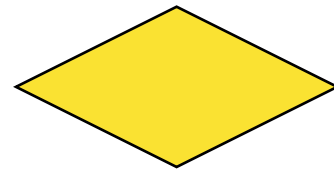


Find out the perimeter of the square.



Which of the following statements is true about rhombus?

- It's all sides are congruent.
- Opposite sides are parallel.
- Any rhombus can also be a square.
- It has all four right angles.



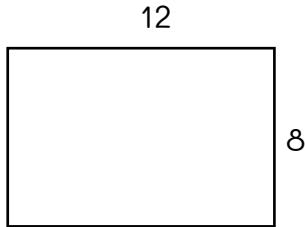
Which of the following statements are NOT true about parallelogram?



- It has four congruent sides.
- Opposite sides are parallel.
- It has four right angles.
- Opposite side are equal.

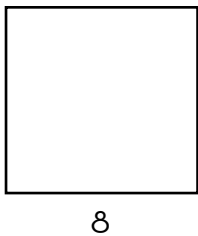
# Answer Key

Find out the area of rectangle.



$$12 \times 8 = 96$$

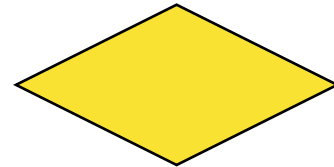
Find out the perimeter of the square.



$$8 + 8 + 8 + 8 = 32$$

Which of the following statements is true about rhombus?

- It's all sides are congruent.
- Opposite sides are parallel.
- Any rhombus can also be a square.
- It has all four right angles.



Which of the following statements are NOT true about parallelogram?

- It has four congruent sides.
- Opposite sides are parallel.
- It has four right angles.
- Opposite side are equal.

