

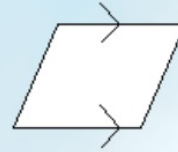
6-1 Classifying Quadrilaterals

Classifying Special Quadrilaterals

Special Quadrilaterals:

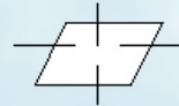
Parallelogram

Both pairs of opposite sides parallel



Rhombus

A parallelogram with 4 \cong sides.



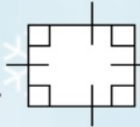
Rectangle

A parallelogram with 4 right angles.



Square

A parallelogram with 4 \cong sides and 4 right angles.



Kite

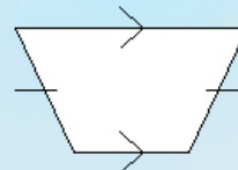
A parallelogram with 2 pairs of adjacent sides \cong and no opposite sides \cong .



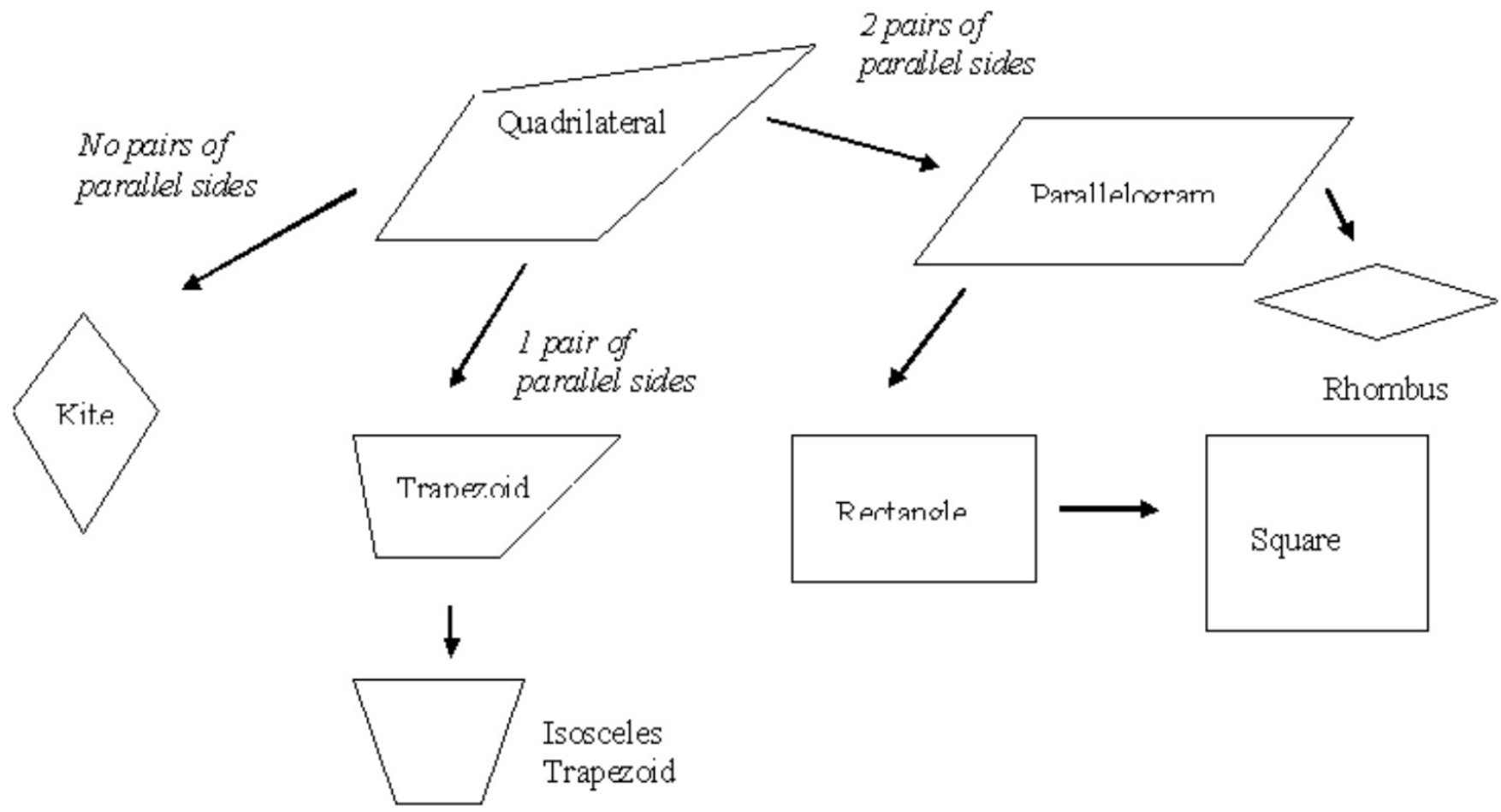
Trapezoid

A quadrilateral with exactly one pair of parallel sides.

Isosceles trapezoid – a trapezoid whose nonparallel sides are \cong .



Quadrilateral Chart:

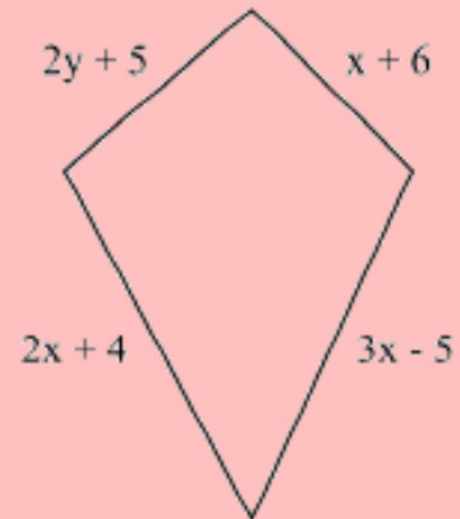


Objectives: To classify, learn and apply the properties of quadrilaterals.

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Examples

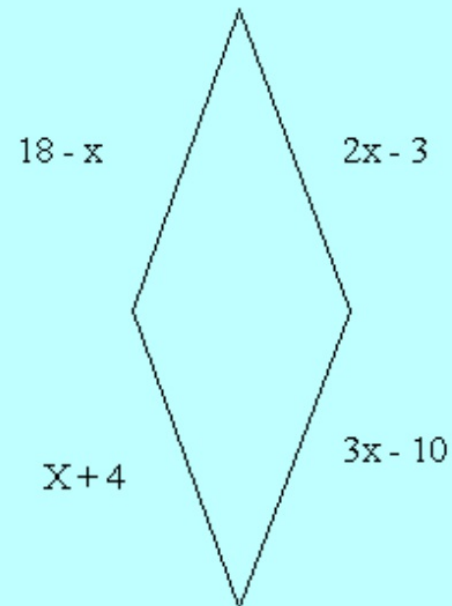
1. Find the values of the variables for the kite.



Objectives: To classify, learn and apply the properties of quadrilaterals. HSC.CO.11

(3) Using the Properties of Special Quadrilaterals

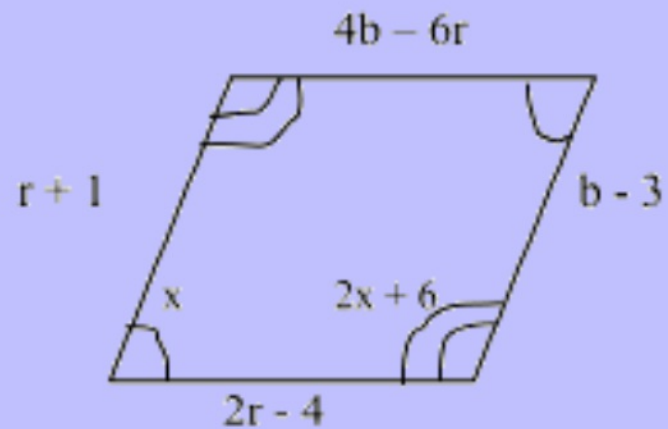
• Find the value of the variables for the rhombus. Then find the lengths of the sides.



Objectives: To classify, learn and apply the properties of quadrilaterals.

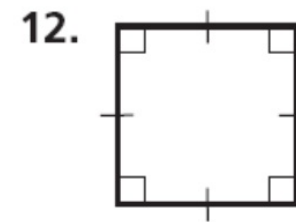
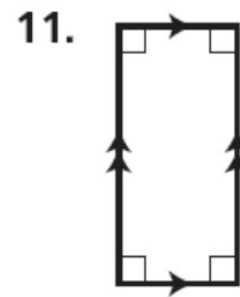
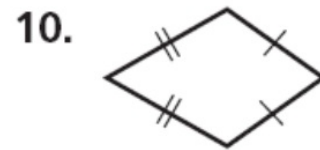
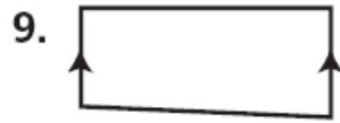
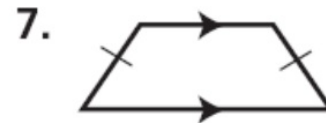
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2. Find the measures of the angles and the sides of the rhombus



Objectives: To classify, learn and apply the properties of quadrilaterals. HSC.CO.11

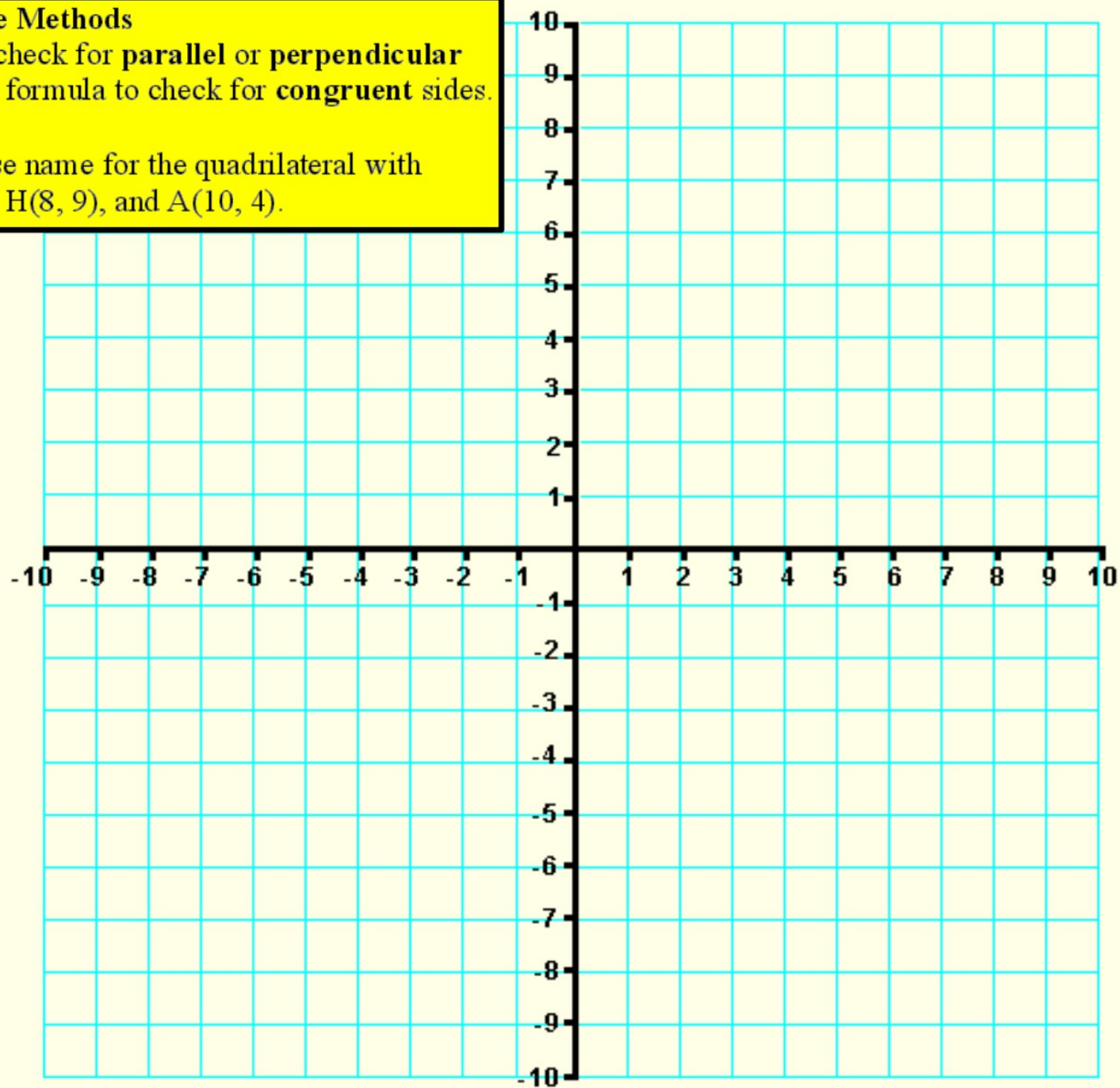
Classify each quadrilateral by its most precise name.



Coordinate Methods

Use the **slope** formula to check for **parallel** or **perpendicular** lines.
Use the **distance** formula to check for **congruent** sides.

Find the most precise name for the quadrilateral with vertices G(-10, 4), B(-2, -9), H(8, 9), and A(10, 4).



**Objectives: To
classify, learn
and apply the
properties of
quadrilaterals.**

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**Assignment:
page 308: 1-12all,
14-26even,
36-41all**