



6-5 Solve It!



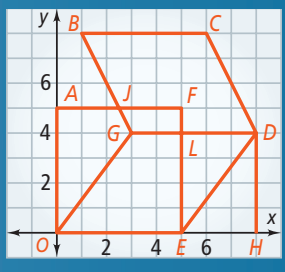
So far you have learned about four types of quadrilaterals.



Getting Ready!

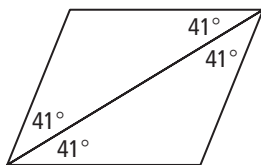
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Which vertices form a square? A rhombus? A rectangle? Justify your answers.

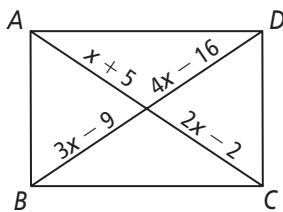


6-5 Lesson Quiz

- Can you conclude that the parallelogram is a rhombus, a rectangle, or a square? Explain.



- For what value of x is parallelogram $ABCD$ a rectangle?



- Do you UNDERSTAND?** Given $WRST$ is a parallelogram and $\overline{WS} \cong \overline{RT}$, how can you classify $WRST$? Explain.

Answers

Solve It!

square: $OEF A$, because it has 4 rt. \angle s and 4 \cong sides; rhombus: $OEDG$, because it has 4 \cong sides of length 5; rectangle: $EHD L$, because it has 4 rt. \angle s and opp. sides \cong

Lesson Quiz

- rhombus; The diagonal bisects a pair of opposite angles, so the figure is a rhombus by Theorem 6-17. Also, by ASA and the converse of the Isosceles Triangle Theorem, all four sides are congruent.

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- Rectangle; \overline{WS} and \overline{RT} are congruent diagonals, and by Theorem 6-18, $WRST$ is a rectangle.