


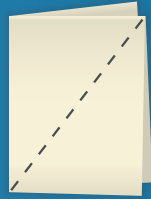
6-4 Solve It!



SOLVE IT!

Getting Ready!

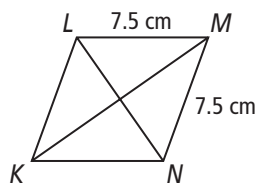
Fold a piece of notebook paper in half. Fold it in half again in the other direction. Draw a diagonal line from one vertex to the other. Cut through the folded paper along that line. Unfold the paper. What do you notice about the sides and about the diagonals of the figure you formed?



Notice that the starting and ending figures are both parallelograms.

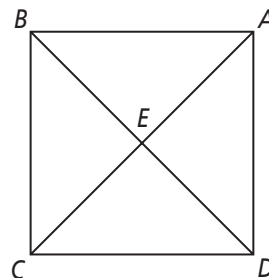
6-4 Lesson Quiz

1. Is parallelogram $KLMN$ a rhombus, a rectangle, or a square? Explain.



2. In the parallelogram above, if $m\angle KLN = 63$, what is $m\angle MNL$?

3. In square $ABCD$, $AE = 3x + 5$ and $BD = 10x + 2$. What is the length of \overline{AC} ?



4. **Do you UNDERSTAND?** You are asked to draw an equiangular rhombus, an equilateral rectangle, and a parallelogram with four right angles. Will all three figures be squares?

Answers

Solve It!

The quadrilateral has \cong sides. Diagonals are \perp bis. of each other, and each diagonal bisects two \sphericalangle .

Lesson Quiz

1. rhombus; The opposite sides of a parallelogram are congruent, so the figure has 4 congruent sides.

2. 63

3. 22

4. A parallelogram with four right angles is a rectangle but not necessarily a square.