NO QUIZ TODAY!!

We will go over any questions from lesson 7.1 and move on to lesson 7.2, so get ready!!

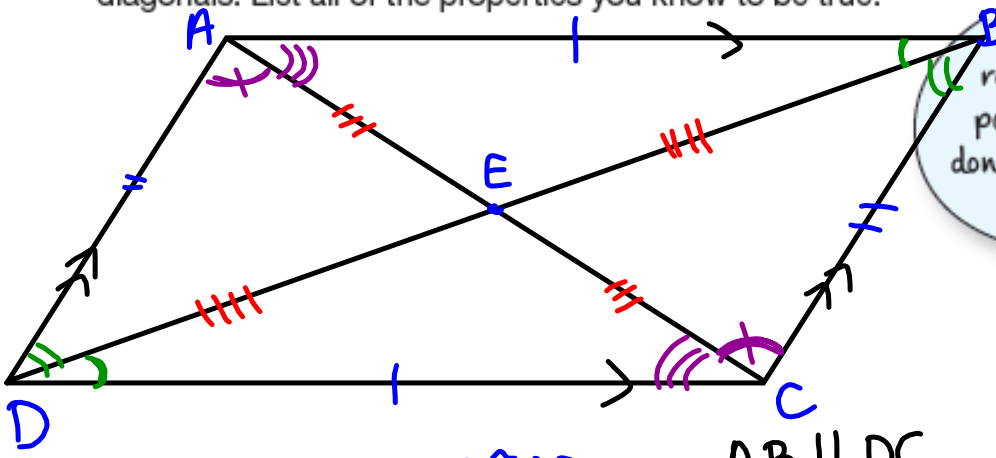
7.2 Parallelograms and Rhombi

Properties of Parallelograms and Rhombi

PG.495-96 IN YOUR BOOK

A parallelogram is a quadrilateral with both pairs of opposite sides parallel.

1. Draw a parallelogram with two diagonals. Label the vertices and the intersection of the diagonals. List all of the properties you know to be true.



Squares and rectangles are also parallelograms. But don't draw a square or rectangle.

$AB \cong DC$ and $BC \cong AD$

$AE \cong EC$ and $DE \cong BE$

$AB \parallel DC$

$BC \parallel DA$

$\angle ABD \cong \angle BDC$ and $\angle DBC \cong \angle BDA$ } alternate interior $\angle$s

$\angle BAC \cong \angle DCA$ and $\angle BCA \cong \angle DAC$

Opposite angles $\cong$ ($\angle DAB \cong \angle BCD$ & $\angle ABC \cong \angle ADC$)

BOTTOM OF PG.499 IN YOUR BOOK

The **Parallelogram/Congruent-Parallel Side Theorem** states: "If one pair of opposite sides of a quadrilateral is both congruent and parallel, then the quadrilateral is a parallelogram."

PG.500 IN YOUR BOOK

A rhombus is a quadrilateral with all sides congruent.

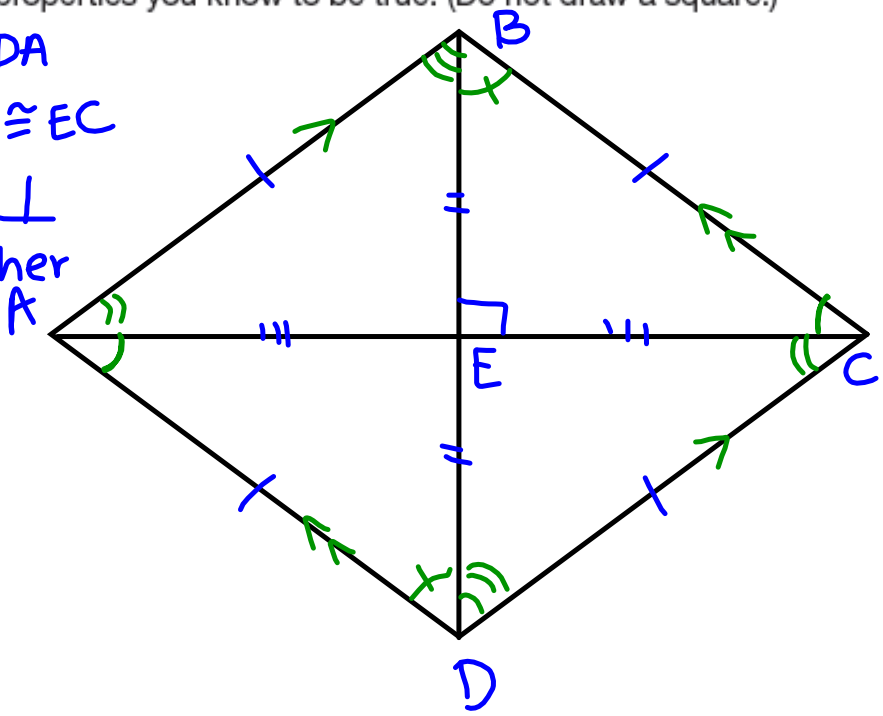
1. Draw a rhombus with two diagonals. Label the vertices and the intersection of the two diagonals. List all of the properties you know to be true. (Do not draw a square.)

$AB \cong BC \cong CD \cong DA$

$BE \cong ED$ and $AE \cong EC$

Diagonals are $\perp$ to one another

$AB \parallel DC$ and $BC \parallel AD$



Classwork/Homework

7.2 Assignment Worksheet

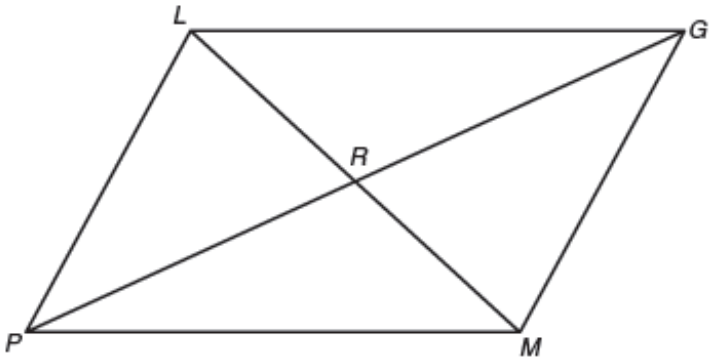
Aug 24-2:00 PM

LESSON 7.2 Assignment

Parallelograms and Rhombi

Properties of Parallelograms and Rhombi

Quadrilateral *PLGM* is a parallelogram.



1. If $m\angle PLG = 124°$, what is $m\angle GMP$? Explain.

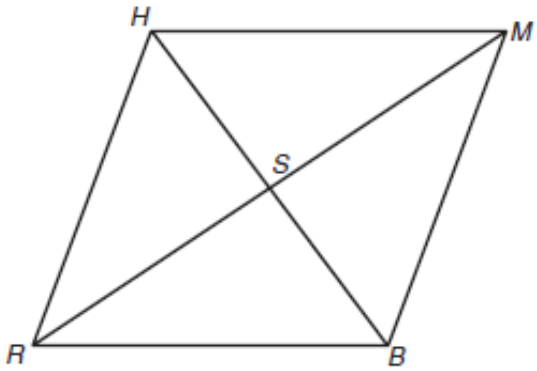
2. If $m\angle LPM = 56°$, what is $m\angle LGM$? Explain.

3. If the length of $\overline{LG}$ is 20 meters, what is MP? Explain.

4. If the length of $\overline{PR}$ is 12 inches, what is GR? Explain.

LESSON 7.2 Assignment

Quadrilateral *RHMB* is a rhombus.



5. If $m\angle HRB = 70°$, what is $m\angle HMB$? Explain.

6. If $m\angle RHB = 55°$, what is $m\angle MHB$? Explain.

7. If the length of $\overline{RB}$ is 25 feet, what is HR? Explain.

8. If the length of $\overline{HS}$ is 18 centimeters, what is SB? Explain.

9. What is $m\angle RSB$? Explain.