

Quiz - Wed 2/1

Trapezoids

Due Mon 2/6

- Ch 8 Review, pp.326-327, #7-29

Due Thurs. 2/9

- Ch 9 Review, pp. 371-375 #8-36; 46-52

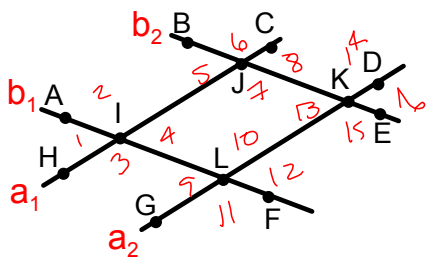
Test #4 - Thurs. 9 Feb

Ch 7 Trapezoids, Ch 8 Transformations, Ch 9 Area

Due Mon. 2/13

- Midterm Review, pp. 330-336, #1-125

Final Exam - Fri. 2/17



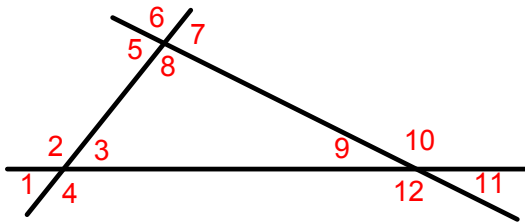
Given $a_1 \parallel a_2$ and $b_1 \parallel b_2$,
what else do we know?

*JKLI is a parallelogram
 $IJ = LK$, $IL = JK$, $\angle 4 = \angle 13$
 $\angle 7 = \angle 10$*

*all pairs of vert. \angle 's are =
 all linear pairs are suppl.*

*supplementary interior \angle 's on same side of transversal
 $\angle 4 \& 10$, $7 \& 13$, $2 \& 5$, $12 \& 15$, $3 \& 9$, $8 \& 14$, $10 \& 13$, $7 \& 10$*

equal corresponding \angle 's :

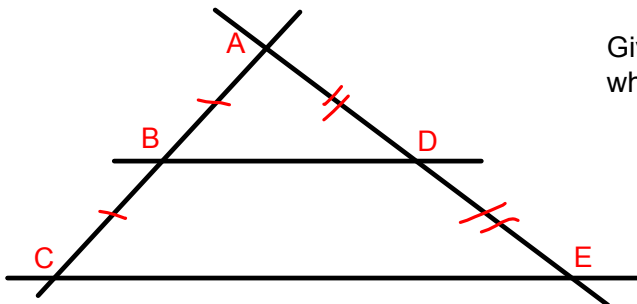
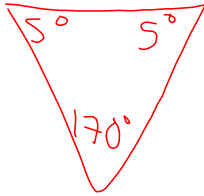


$$\angle 3 + \angle 8 + \angle 9 = 180^\circ$$

$$\angle 2 = \angle 8 + \angle 9 = \angle 4$$

$$\angle 12 = \angle 3 + \angle 8 = \angle 10$$

$$\angle 7 = \angle 3 + \angle 9 = \angle 5$$



Given $AB=BC$ and $AD=DE$,
what else do we know?

BD is a midsegment

$$BD \parallel CE$$

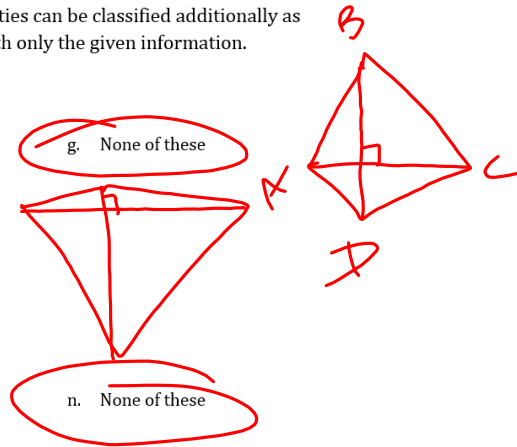
$$BD = \frac{1}{2} CE$$

$BDEC$ is a trapezoid

Part IV - Determine whether each of the quadrilaterals with the given properties can be classified additionally as any special quadrilaterals. Circle each correct answer that can be assumed with only the given information. Drawing a picture may help in many situations.

43. Quadrilateral $ABCD$ with $AC = BD$

- a. Trapezoid
- b. Isosceles trapezoid
- c. Parallelogram
- d. Rectangle
- e. Rhombus
- f. Square



44. Quadrilateral $ABCD$ with $AC \perp BD$

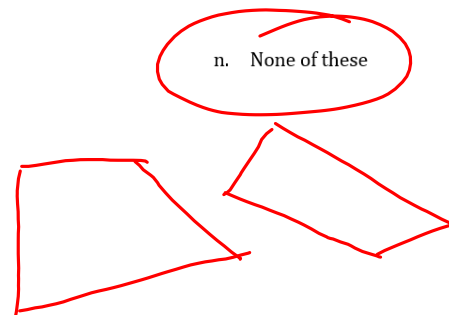
- h. Trapezoid
- i. Isosceles trapezoid
- j. Parallelogram
- k. Rectangle
- l. Rhombus
- m. Square

45. Quadrilateral $ABCD$ with AC bisecting BD

- a. Trapezoid
- b. Isosceles trapezoid
- c. Parallelogram
- d. Rectangle
- e. Rhombus
- f. Square
- g. None of these

46. Quadrilateral $ABCD$ with $AB = CD$

- h. Trapezoid
- i. Isosceles trapezoid
- j. Parallelogram
- k. Rectangle
- l. Rhombus
- m. Square



parallelogram

rhombus

square

rectangle