

# Cornell Notes

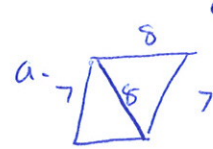
Name	Eduardo Delgado	Date	02/06/12
Topic	Prove a quadrilateral is a parallelogram	Class/Subject	Geometry p.2 Mr. Asberry

(8:55)

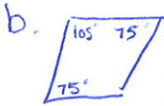
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Notes (9:22)

ex. 2



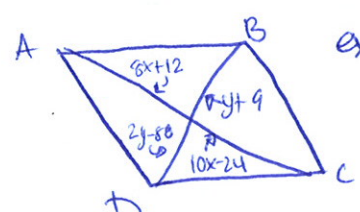
a.  $\rightarrow$



b.  $\begin{matrix} 105^\circ & 75^\circ \\ 75^\circ & \end{matrix}$

Find missing measure

ex. 1



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Homework

-assignment # 3-1

practice 6.3

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Copy theorems (6-5, 6-6, 6-7)  
pg. 321-322

Go over the answers

Determine whether the quadrilateral is a parallelogram. Explain.

a.) can't determine b/c only know 1 pair of opposite sides are congruent but not the other.

b.) if both pairs of opposite angles are congruent, the quadrilateral is a parallelogram (6-6).

Find values for x + y

Diagonals of parallelogram bisect one another

$$10x - 24 = 8x + 12 \quad \leftarrow / \rightarrow \quad 2y - 80 = y + 9$$

$$2x = 36 \quad \leftarrow / \rightarrow \quad y = 89$$

$$x = 18 \quad \leftarrow / \rightarrow$$

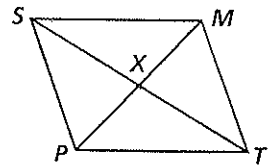
Students used their newly discussed theorems to find whether a ~~para~~ quadrilateral is a parallelogram.

# Practice 6-3

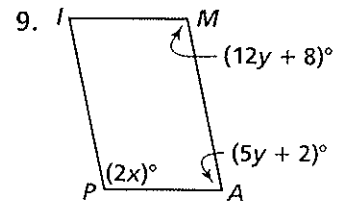
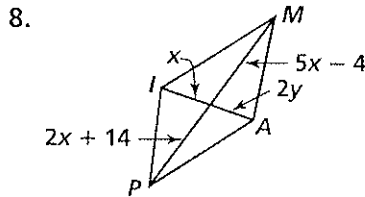
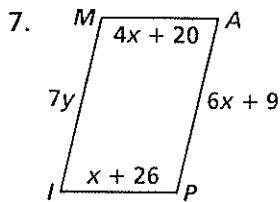
## Proving That a Quadrilateral Is a Parallelogram

State whether the information given about quadrilateral  $SMTP$  is sufficient to prove that it is a parallelogram.

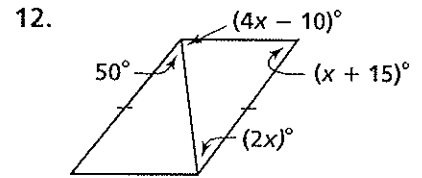
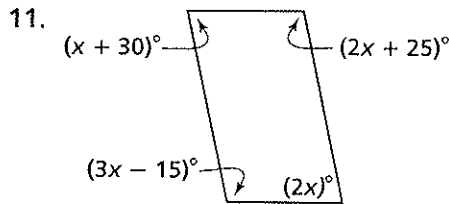
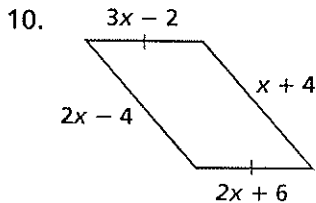
- |   |   |
|---|---|
| 1. $\angle SPT \cong \angle SMT$  | 2. $\angle SPX \cong \angle TMX, \angle TPX \cong \angle SMX$                 |
| 3. $\overline{SM} \cong \overline{PT}, \overline{SP} \cong \overline{MT}$ | 4. $\overline{SX} \cong \overline{XT}, \overline{SM} \cong \overline{PT}$     |
| 5. $\overline{PX} \cong \overline{MX}, \overline{SX} \cong \overline{TX}$ | 6. $\overline{SP} \cong \overline{MT}, \overline{SP} \parallel \overline{MT}$ |



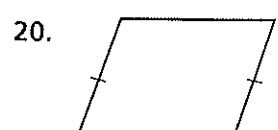
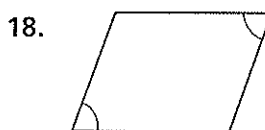
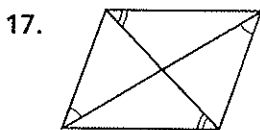
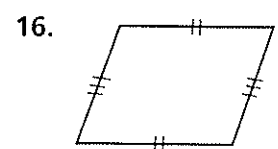
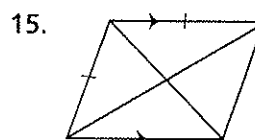
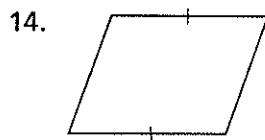
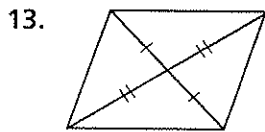
**Algebra** Find the values of  $x$  and  $y$  for which the figure must be a parallelogram.



**Algebra** Find the value of  $x$ . Then tell whether the figure must be a parallelogram. Explain your answer.



Decide whether the quadrilateral is a parallelogram. Explain your answer.



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