

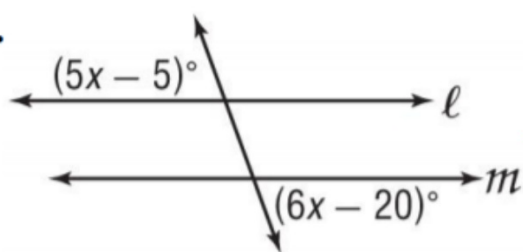
Objetivo:

Recognize angle pairs that occur with parallel lines.

Prove that two lines are parallel.

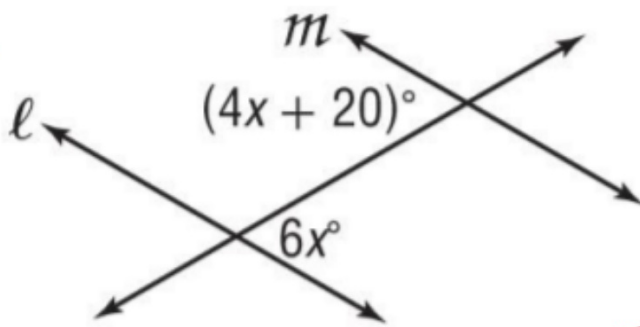
Lesson 3-5  
Study Guide (PDF)

1.



$$\begin{aligned} 5x - 5 &= 6x - 20 \\ -6x & \quad -6x \\ \hline -x - 5 &= -20 \\ +5 & \quad +5 \\ \hline -x &= -15 \\ \frac{-x}{-1} &= \frac{-15}{-1} \\ x &= 15 \end{aligned}$$

2.



$$\begin{aligned} 4x + 20 &= 6x \\ -20 &\quad -20 \\ \hline 4x &= 6x - 20 \\ -6x &\quad -6x \\ \hline -2x &= -20 \\ -2 &\quad -2 \\ \hline x &= 10 \end{aligned}$$

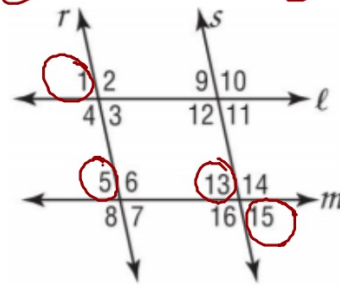
# Study Guide: Lesson 3-5 (Segunda página)

## 1. Complete the proof.

**Given:**  $\angle 1 \cong \angle 5$ ,  $\angle 15 \cong \angle 5$

**Prove:**  $\ell \parallel m$ ,  $r \parallel s$

**Proof:**



Statements	Reasons
1. $\angle 15 \cong \angle 5$	1. <u>given</u>
2. $\angle 13 \cong \angle 15$	2. <u>vertical angles</u>
3. $\angle 5 \cong \angle 13$	3. <u>transitivity property on 1 and 2</u>
4. $r \parallel s$	4. <u>if <math>\angle</math>s corr. <math>\cong</math>, then Parallel lines</u>
5. <u><math>\angle 1 \cong \angle 5</math></u>	5. <u>Given</u>
6. <u><math>\ell \parallel m</math></u>	6. <u>If corr <math>\angle</math> are <math>\cong</math>, then lines <math>\parallel</math>.</u>