Bellwork 11/18/15
Today: 6-2 and 6-3 notes, go over tests

Given two parallel lines cut by a transversal, find the value of x.

\[ \begin{align*}
4x - 4 &= 2x + 32 \\
2x + 4 &= 32 \\
x &= 16
\end{align*} \]

Section 6.2: Parallelograms
OBJ: Identify the FOUR properties of a parallelogram.

Parallelograms
- A quadrilateral with both pairs of opposite sides parallel.
- Symbol is \( \parallel \)

Properties of Parallelograms
1. Opposite sides are congruent.
2. Opposite angles are congruent.
3. Consecutive angles are supplementary
   \[ \begin{align*}
m_\angle 1 + m_\angle 4 &= 180^\circ \\
m_\angle 1 + m_\angle 2 &= 180^\circ
\end{align*} \]
4. Diagonals bisect each other.
   - Split in half (2 equal parts).
Example 1: Fill in the blank. Give a reason for your answer.

Example 2: Find the measures in parallelogram ABCD. Explain.

Example 3: Find x.

Example 4

Example 5

Example 6
Guided Practice

Assignment 6-2: p. 364 # 10, 14, 26, 28, 30

<table>
<thead>
<tr>
<th>Content</th>
<th>Level 4</th>
<th>Level 3</th>
<th>Level 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parallelogram has accurate side and angle measurements. All parts are labeled and listed on worksheet.</td>
<td>Sides measurements or angle measurements have minor mistakes. Missing some parts in list.</td>
<td>Not accurate or correct measurements for design. Listed and labeled parts incorrectly.</td>
<td></td>
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<tr>
<td>Creativity</td>
<td>Design is original and elaborate. Added detail and color to enhance design and highlight properties of parallelogram.</td>
<td>Not colored well, few extra details to enhance design.</td>
<td>Lack of originality and creativity. Simple design with few details.</td>
</tr>
</tbody>
</table>