### Chapter 3: Trigonometry

#### 3.7 Cosine Law

For non-right triangles that can’t be solved with the sine law

<table>
<thead>
<tr>
<th>SAS</th>
<th>SSS</th>
</tr>
</thead>
</table>

Cosine Law can be proven based on the ___________________________ Theorem

![Diagram of a triangle](image.png)
Example #1:

Example #2:
### Assignment:

<table>
<thead>
<tr>
<th>Textbook: p.136 #4,5,6ac,7ac</th>
</tr>
</thead>
<tbody>
<tr>
<td>4a)</td>
</tr>
<tr>
<td>5a)</td>
</tr>
</tbody>
</table>
Practice Quiz

1) Use the Cosine Law to find the measure of side $a$.

2) Use the Cosine Law to find the measure of angle $A$.

Answers: 1) 13 cm 2) $72^\circ$