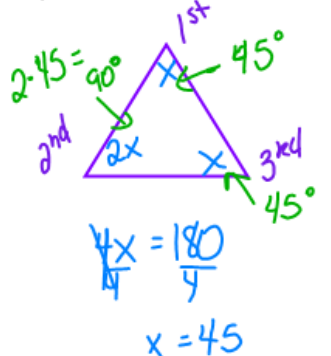
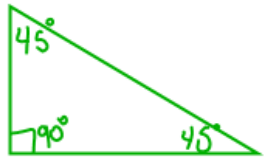
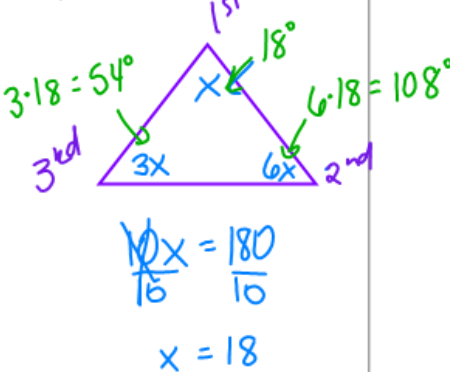
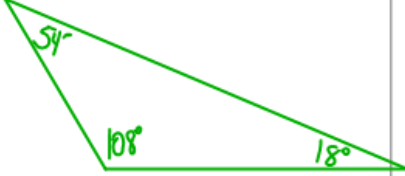


Lesson 5-3

Example 3: Finding Unknown Angles

Find the unknown angle measure.

I Do	We Do
<p data-bbox="680 451 1086 544">The second angle in a triangle is twice as large as the first. The third angle is half as large as the second. Find the angles measures and draw a possible figure.</p>  <p data-bbox="792 762 952 901"> $4x = \frac{180}{4}$ $x = 45$ </p> 	<p data-bbox="1099 451 1505 544">The second angle in a triangle is six times as large as the first. The third angle is half as large as the second. Find the angles measures and draw a possible figure.</p>  <p data-bbox="1265 762 1424 917"> $10x = \frac{180}{10}$ $x = 18$ </p> 

Lesson 5-3

<p><i>triangle inequality theorem</i></p>	<p>Decode</p>
<p>Definition the <u>sum</u> of 2 sides of a triangle should be greater than the 3rd side</p>	<p>Example $\underline{7\text{cm}}$ $\underline{4\text{cm}}$ $\underline{5\text{cm}}$ $7+4 > 5$ ✓ $4+5 > 7$ ✓ $5+7 > 4$ ✓ $11 > 5$ ✓ $9 > 7$ ✓ $12 > 4$ ✓</p>

Example 4: Using the Triangle Inequality Theorem

Tell whether a triangle can have sides with the given lengths.

I Do	We Do	You Do
<p><u>6 ft, 3 ft, 10 ft</u> $6+3 > 10$ $9 > 10$ NO</p>	<p><u>8 ft, 10 ft, 13 ft</u> $8+10$ $18 > 13$ ✓ $10+13$ $23 > 8$ ✓ $8+13$ $21 > 10$ ✓ yes</p>	<p>2 m, 4 m, 6 m $2+4$ $6 > 6$ NO</p>