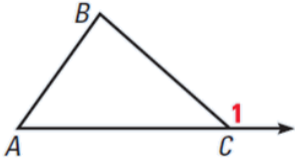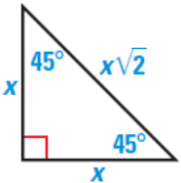| **Lesson 5.1 – Big Ideas**	**Your Notes**
• Create triangles on the coordinate plane – find the third vertex • Classify triangles graphed on the coordinate plane based on their side lengths – scalene, isosceles, or equilateral • Determine whether a triangle, graphed on the coordinate plane, is a right triangle	
Lesson 5.2 – Big Ideas	**Your Notes**
• Triangle Sum Theorem • The relationship between interior angle measures and side lengths • Remote interior angles of a triangle • Exterior Angle Theorem • Exterior Angle Inequality	

Lesson 5.3 – Big Ideas	**Your Notes**
• Triangle Inequality Theorem	

Lesson 5.4 – Big Ideas	**Your Notes**
• 45° - 45° - 90° Triangle Theorem • Area of 45° - 45° - 90° triangles	A right triangle with angles $45°$ and $45°$, legs labeled x and x, and hypotenuse labeled $x\sqrt{2}$.

Lesson 5.5 – Big Ideas	**Your Notes**
• 30° - 60° - 90° Triangle Theorem • Area of 30° - 60° - 90° triangles	A right triangle with angles $60°$ and $30°$, short leg labeled x, hypotenuse labeled $2x$, and long leg labeled $x\sqrt{3}$.