7.2 Use the Converse of the Pythagorean Theorem

**Converse of the Pythagorean Theorem**

If $\sqrt{a^2 + b^2} = c$, where $a$ and $b$ are the length of the __________ sides and $c$ is the length of the __________ side, then it is a __________ triangle.

Tell whether a triangle with the given sides is a right triangle.

4, $4\sqrt{3}$, 8

If $c$ is the __________ side and...

$c^2 < a^2 + b^2 \rightarrow$ __________ triangle
$c^2 = a^2 + b^2 \rightarrow$ __________ triangle
$c^2 > a^2 + b^2 \rightarrow$ __________ triangle

Show that the segments with lengths 3, 4, and 6 can form a triangle

Classify the triangle as acute, right or obtuse.

Assignment: 444 #2-30 even, 33, 38, 40, 44-52 even = 23

Extra Credit: 447 #2, 8 = +2