## Theorem 8-3

If the square of the length of the longest side of a triangle is greater than the sum of the squares of the lengths of the other two sides, the triangle is obtuse.

If 
$$c^2 > a^2 + b^2$$
, the triangle is obtuse.



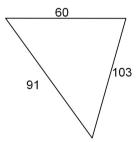
## Theorem 8-4

If the square of the length of the longest side of a triangle is less than the sum of the squares of the lengths of the other two sides, the triangle is acute.

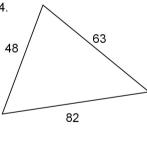
If 
$$c^2 < a^2 + b^2$$
, the triangle is acute.



3.

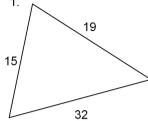


4.

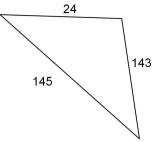


For 1 to 4 tell if each triangle is Right, Acute, or Obtuse.



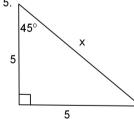


2.



Find the length of each side labeled x. Give answer in simplified radical form.

5.



6.

