

**Math 270 - Basic Discrete Mathematics**  
**Practice Quiz on Section 4.8**

**Directions:** Answer the problems given below.

1. Is the number  $5 + 3\sqrt{2}$  rational or irrational? Why or why not?

2. Is it true that whenever  $x, y$  are positive irrational numbers,  $x + y$  is also irrational? Why or why not?