Integrated Math 3 Unit 5: Trig. Representations and Modeling 4.5

Date:\_\_\_\_\_ Period:\_\_\_\_\_

Name:

## *Objective: To use properties of special right triangles to find the lengths of sides.*

**Warm Up:** You are standing 200 feet from the base of a redwood tree. You estimate the angle of elevation to the top of the tree is 60 degrees. What is the approximate height of the tree?



## SPECIAL RIGHT TRIANGLES: 30-60-90 and 45-45-90



**Example 1:** Use trig to solve the following triangles given the following. Let angle B be a right angle:

| a =   | A= 60 degrees |
|-------|---------------|
| b =   | B =           |
| c = 5 | C =           |



**45** 

**Example 2:** Find the missing side(s) lengths. Leave your answers as simplified radical expressions.













E.)





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F.)

