Name _____ Date _____

Practice Worksheet
Content Standard: Solve Equations & Inequalities
Student Learning Expectations: Integrate algebra and geometry in problems.

1. A community center in Arkadelphia is paving a rectangular piece of land to make a parking lot. If the area of land to be used is 840 square feet and the length of the parking lot will be 21 feet, what will be the width of the parking lot?

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2. Two bedrooms, each with 352 square feet of wall space, are scheduled to be painted. One can of paint covers 400 square feet. How many full cans of paint should be purchased if each room needs 2 coats of paint?

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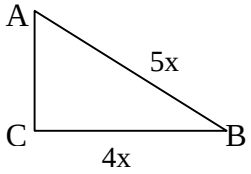
3. In the right triangle below, what is the length of AC?



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4. A rectangle has a length that is 3 more than 5 times the width. Sketch and label a diagram of this sentence.

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5. The surface area of a cube is 384. Using the formula SurfaceArea = 6 * $(edge)^2$, what is the length of one edge?

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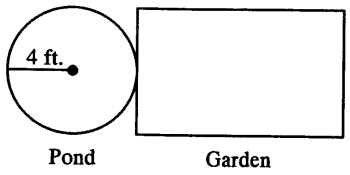
6. Joe has a pond in his backyard with a garden next to it. See the drawing at right.
   a. What is the area of the pond? Use 3.14 for pi, show all of your work, and include units in your answer.



(Not drawn to scale.)

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b. The garden covers twice the area of the pond. If the width of the garden is the same as the diameter of the circle, what is the length of the garden? Show all of your work.

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