Name: _____

Hour: _____ **Date:** _____

Advanced Area Application Graded Assignment
Answer Page

1.   (a) _____

      (b) _____

      (c) _____

2. Area of plastic ring = _____

3. h = _____

4. The total area needed to paint is _____ so they will need _____ Quarts

5. Answer all questions and use correct units.

    (a) How many sections of the bug zapping material will she need? (a) _____

    (b) How much will the bug zapper cost before taxes? (b) _____

    (c) How many tiles will she need? (c) _____

    (d) How much will the tiles cost before taxes? (d) _____

    (e) What is the rounded square footage of wood needed for this project? (e) _____

    (f) How much will the wood cost BEFORE taxes? (f) _____

    (g) What is the total square footage needed of carpet? (g) _____

    (h) Convert the carpet order to square yards. (h) _____

    (i) How much will the carpeting project cost before taxes? (i) _____

    (j) How much will the total cost of the rennovations be, before taxes? (j) _____

    (k) How much will the taxes alone cost? (k) _____

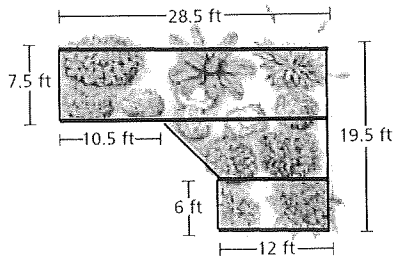   (l) What is the total cost (including tax) of her project? (l) _____

    (m) Will Mrs. Faehner have enough money to complete the renovation? (m) _____
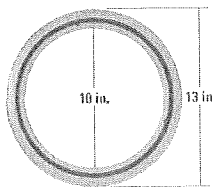
Name: _____ Date: _____ Hour:_____

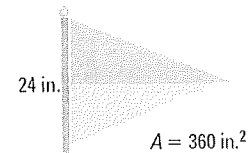# Advanced Area Application Graded Assignment

Area Applications – CCSS

1. Katie is using the given plan to convert part of her lawn to a xeriscape garden. A newly planted xeriscape uses 17 gallons of water per square foot per year. (a) Find the area of her garden (round to the nearest hundredth). (b) How much water will the garden require in one year? (c) The lawn that Katie is replacing requires 79 gallons of water per square foot per year. How much water will Katie save by planting the xeriscape garden per year? Round your answers to the nearest hundredth.
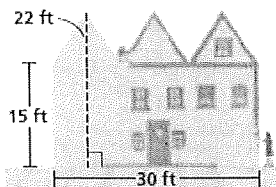

2. A plastic flying disc is circular and has a circular hole in the middle. If the diameter of the outer edge of the ring is 13 inches and the diameter of the inner edge of the ring is 10 inches, what is the exact area of the plastic ring?

3. You are making a triangular flag with a base of 24 inches and an area of 360 square inches. How long should the flag be?

24 in.

$A = 360$ in.²

4. Dominick and Ramy are painting a stage backdrop for a play. The paint they are using covers 90 square feet per quart. How many quarts of paint should they buy to paint the figure below? They can only buy full quarts, so if they need a fraction of the quart, they must still buy the whole thing. (Round up!)

5. Complete the following- showing all work in a labled manner. You should write out complete words and indicate what section (a-m) you are working on at the time.

Mrs. Faehner will be rennovating her home this summer.
She is having a pest control problem so she is having a bug zapper placed along the perimeter of her home. The materials for the bug zapper costs $15 for each 2 foot section. It is only sold by two foot sections so you cannot buy a portion of the material. (a) How many sections of the bug zapping material will she need? (b) How much will the bug zapper cost before taxes?
She will be tiling the areas labeled bath, kitchen and entry. The tiles are 1 square foot and cost $1.05 each. Again, she will need to round up to find the total number of tiles she needs because they are only sold in square foot sections. (c) How many tiles will she need? (d) How much will the tiles cost before taxes?
She is planning on putting wood floors in her master bedroom and hallway. The wood flooring costs $10 per square foot and should be rounded up to the nearest foot- to assure the whole area is covered in wood. (e) What is the rounded square footage (to the nearest foot) of wood needed for this progect? (f) How much will the wood cost BEFORE taxes?
She is planning on carpenting the living/dining room and the two bedrooms. The carpeting she is planning on using costs $25.08 per SQUARE YARD with free delivery and instalation. (g) What is the total square footage (round to the nearest tenth) needed of carpet? (h) Convert the carpet order to square yards. (i) How much will the carpeting project cost before taxes?
Mrs. Faehner has $7,000 to rennovate her home this summer. (j) How much will the total cost of the rennovations be (including the bug zapper), before taxes? (k) How much will the taxes alone cost? (l) What is the total cost (including tax) of her project? (m) Will Mrs. Faehner have enough money to complete the renovation?

Recall this is half of the circumference $C = \frac{1}{2}2\pi r$