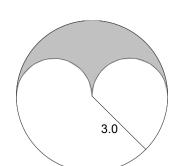
1. Find the shaded areas; round to the nearest hundredth.

6.0 cm

(a)



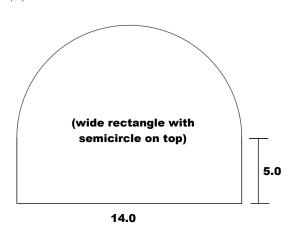
(b)

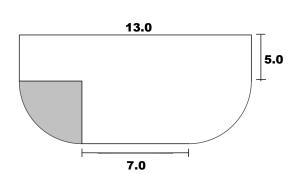


2. Find the unshaded areas; round to the nearest hundredth.

(a)



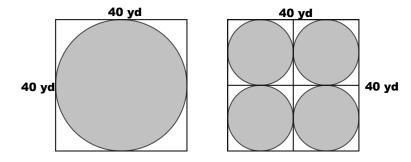




(c) 3 m 5 m

(continued on back)

3. A woman wants to set up sprinklers in her garden; she can either buy one large sprinkler or four small ones. Given that the sprinklers can water the shaded areas in each diagram, which set-up makes more sense for her?



- 4. In the figure in Problem #20b on page 844, imagine that the 2 cm measurement applies not to the length through the inside of the shape, but to the straight, slanted edge along the right side. (You may assume that left and right sides are equal in length.) Where the 2 used to be is now blank. Find the area of this differently labeled shape. (Note that the 1cm measurement in the book is intended to be just halfway across the circle.
- 5. Now imagine that the 2 is along the slanted edge as above, but the 1 MOVES to where the 2 USED TO BE. (So there is now no label along the bottom of the semicircle.) Find the area of this newly relabeled shape.

## Math 118 - Dr. Miller - Solutions to HW #8: Areas of Circles

- 1. (a)  $21.87 \ cm^2$ 
  - (b) 21.21 (no units given initially, so none for answer)
- 2. (a) 146.93
  - (b) 93.07
  - (c)  $125.7 m^2$
- 3. Both sprinkler set-ups reach the same area (1256.6  $yd^2$ ).
- 4.  $2.44 \ cm^2$
- 5.  $5.88 \ cm^2$