Math 318 Homework December 2 Name_____

1. Show work where appropriate. Leave π in any answers. Be sure to use appropriate units.

   (a) Find the area of a circle which has a diameter of 6 inches.

   (b) Find the circumference of a circle which has a radius of 5 meters.

   (c) Find the radius of a circle which has an area of 16π square centimeters.

   (d) Find the diameter of a circle which has an area of 100π square yards.

   (e) Find the radius of a circle which has a circumference of 100π meters.

(f) Find the diameter of a circle which has a circumference of 36π kilometers.

(g) Find the circumference of a circle which has an area of 64π in^2.

(h) Find the area of a circle which has a circumference of 49π ft.

2. Assuming that each lower case letter (except for π) represents a length, circle the attribute that each formula could be measuring:

(a) $2lw + 4wh$

length area volume

(b) $2\pi rh + 2\pi r^2$

length area volume

(c) $2(l + w)$

length area volume

(d) $\frac{1}{3}Bh$, where B is the area of the base

length area volume