Name:

Date:

Lesson 10.1.2 Homework

* **10-26.** Find the area of the base of each cylinder below, and then calculate the volume of each cylinder.  Show your steps.



* **10-27.**What is the volume of a hexagonal-based prism with a height of 12 in. and a base area of 62 in.2?  Would the volume be different if the base were a pentagon with an area of 62 in.2?  Explain.
* **10-28.** Find the length of the side labeled  x  in each of the right triangles pictured below.  Identify each answer as a rational or irrational number.
	1. 
	2. 
	3. 
*

**10-29.** Simplify each expression.

* 1. 
	2. 
	3. 8x–3(8x)2
	4. 
*

**10-30.**Simplify each expression.

* 1. 
	2. 
	3. 
	4. 
	5. 
	6. 
*

**10-31.**Tim wants to invest some money that his grandmother gave him.  He has $2000 and can put it in an account with simple interest or an account with compound interest.

* 1. The simple interest account has an interest rate of 10%.  With this interest rate, what is the total amount in the bank after 5 years?
	2. The compound interest account is also for 5 years (compounded yearly), but it has an interest rate of 8%.  Find the total amount that he would have in this account.
	3. Which account is a better investment?