

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**BLM 7-1**

## Chapter 7 Problems of the Week

1. Lucy makes \$9/h and time and a half for every hour she works over 40 h per week.

a) What is Lucy's regular pay for a 40 h work week?

b) How much does Lucy make for each hour of overtime?

c) Lucy worked a total of  $n$  hours.  
Complete the expression for the number of hours overtime.

\_\_\_\_\_ - \_\_\_\_\_

d) Write a polynomial for her maximum weekly income.

\_\_\_\_\_



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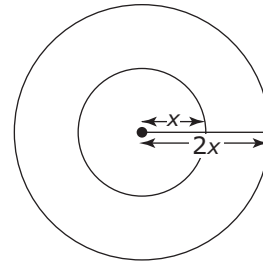
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**BLM 7-1**  
(continued)

**2.** A circle of radius  $x$  shares a centre point,  $C$ , with a circle of radius  $2x$ .

**a)** Write a polynomial for the area of each circle.

Circle with radius  $x$ :



Circle with radius  $2x$ :

**b)** What is the ratio of the area of the circle of radius  $x$  to the area of the circle of radius  $2x$ ?

**c)** Write the ratio in simplest form.

