Math 4 Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**3-1 Practice** Date\_\_\_\_\_\_\_\_

1. A utility company burns coal to produce electricity. The cost *C* (in dollars) of removing *p* percent of the air pollutants in the stack emission of the utility company is given by the equation



a. Determine the domain of the expression in the context of the problem.

b. Can all the pollutants in the stack emission be removed? Explain.

c. Explain mathematically why the company claims that it will never have enough money to remove 80% of the pollutants from the stack emission.