Name _____ Date _____ Class _____

CHAPTER 3

Project

For a Good Cause

Activity 1: Washing Cars *Use with Lesson 3-3*

A group of students is planning to wash cars at their school to raise money for a homeless shelter. The car washes will be available every weekend for two months. The students are considering three different plans. In each plan, drivers purchase a booklet of coupons and each coupon entitles the driver to one car wash at the school. A car wash at the local gas station costs $10.95 including tax.

Plan	Number of Coupons	Cost of Coupon Booklet
A	3	$32.99
B	5	$52.49
C	8	$79.49

1. How many car washes can you get at the gas station and still pay less than Plan A? Plan B? Plan C? Write and solve an inequality to find the answers.

_____

2. Suppose a driver expects to wash her car 3 times over the two-month period. Is it better to buy the coupon booklet or go to the gas station? Explain your thinking.

_____

3. Suppose a driver expects to wash her car 8 times over the two-month period. Is it better to buy the coupon booklet or go to the gas station? Explain your thinking.

_____

4. The students think that drivers will pay a maximum of $43 for the coupon booklet, so they decide to develop a new plan. The students want the cost of each car wash to be at least $10, but less than the cost at the gas station. How many coupons should the $43 booklet contain? Explain.

_____

5. Research the cost of a car wash in your area. Based on the number of times you think most drivers wash their cars over a two-month period, develop a plan for a coupon booklet similar to those shown above.

_____

Name _____ Date _____ Class _____

CHAPTER 3

Project

For a Good Cause continued

Activity 2: T-shirts *Use with Lesson 3-4*

A group of students decide to have custom T-shirts made to promote their fund-raiser. Prices for the T-shirts are shown below. There is also a $3.50 shipping and handling charge per order. Assume that the students have a budget of $200 for the T-shirts and that the shirts must be purchased in packs of ten.

Type of T-shirt	Cost per 10 Shirts ($)
Long-sleeve, blue	65
Long-sleeve, white	55
Short-sleeve, blue	50
Short-sleeve, white	45

1. How many long-sleeve, blue T-shirts can the students buy? Write and solve an inequality to find the answer.

_____

2. How many short-sleeve, white T-shirts can the students buy? Write and solve an inequality to find the answer.

_____

3. Which type of T-shirts should the students buy if they want to use as much of the budget as possible? In this case, how much money will they have left over?

_____

4. The manufacturer charges an additional $7.50 per pack to put a design on both the front and back of the T-shirts. How many long-sleeve, blue T-shirts can the students buy if they want a design on the front and back? How much additional money would they need in order to buy one more pack?

_____

5. Research the cost of having custom T-shirts printed. Be sure to find out the cost of shipping and handling. Write and solve an inequality to determine how many T-shirts you could order with a $200 budget. Explain your solution.

_____

_____