6-3 Standard Form Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Learning Target - I can write and solve equations in Standard Form.**

Write and solve an equation in Standard Form for each situation.

1) The freshmen class holds a car wash to raise money every year. A local merchant donates

 all of the supplies. A wash costs $5 per car and $6.50 per van or truck.

 a) Define a variable for the number of cars. Define a different variable for the number

 of vans or trucks.

 b) Write an equation in standard form to relate the number of cars and vans or trucks

 the students must wash to raise $800.

 c) Use your equation to determine the number of vans or trucks that must be washed if

 40 cars are washed.

2) Hannah runs at an average rate of 8 miles per hour. She walks at an average rate of

 3 miles per hour.

 a) Define a variable for time spent walking. Define a different variable for time spent

 running.

 b) Write an equation in standard form to relate the times she could spend running and

 walking if she travels a distance of 15 miles.

 c) Use your equation to determine the number of hours she would need to run if she

 walked for 1 hour.

3) Sara’s 2nd hour class is raising money to send her to American Idol. They are selling cookies

 for $2.00 each and bagels for $1.50 each.

 a) Define a variable for the number of cookies. Define a different variable for the

 number of bagels.

 b) Write an equation in standard form to relate the number of cookies and bagels

 the students must sell to raise $500.

 c) Use your equation to determine the number of cookies they need to sell if they

 sell 200 bagels.