Foundati	ons of Algebro	ı
Day 11	- Standard	Form

Linear Functions	Practice
Name:	

Practice Assignment

Date:______Block:_____

Review:

1. Convert 8 miles to feet.

2. Simplify the expression: 5(x-3) - 2(x+4) - 9

Use the scenario below to answer questions 3-8.

The athletic department will raise money by charging admission to an upcoming football game. The price will be different for students and adults. Student tickets costs \$3 each and adult tickets cost \$5 each. The goal is to raise \$5000 from the sale of tickets to the game.

Unit 5:

- 3. Define variables that represent the unknown quantities in the problem. Then write an equation that can be used to find the number of student and adult tickets if the goal is reached.
- 4. Using the equation, calculate the x and y intercepts of the equations. Show all your work.

- 5. What do the intercepts means in terms of the problem situation? Use compete sentences in your answer.
- 6. Assuming the athletic department met its goal of \$5000, find the number of student tickets sold if 600 adult tickets sold.

- 7. Assuming the athletic department met its goal of \$5000, find the number of adult tickets sold if 400 student tickets sold.
- 8. Write the equation from Question 3 in slope intercept form.

Problems 9-11: Write an equation in standard form to model each situation. Then answer the question.
9. You have \$25 in a book store gift card. You want to buy magazines that cost \$3 each and books that cost \$5 each. How many books can you buy if you buy 3 magazines?
Equation:
Solution:
10. Gail plans to spend \$20 on rides at an amusement park. The Ferris wheel costs \$2 and roller coasters cost \$3. How many Ferris wheel rides can Gail ride if she rides roller coasters 4 times?
Equation:
Solution:
11. A 100-point test has x questions worth 2 points apiece and y questions worth 4 points apiece. If you have 24 questions worth 4 points apiece, how many questions will be worth 2 points apiece?
Equation:
Solution:

12. Calculate the x and y intercepts of the equation 2x - 6y = 12. Then convert the equation into slope intercept form.