

**Math 70 Quiz #7**  
**February 23, 2011**

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

Show all work and answers on a separate paper. Staple this sheet to your answers. Simplify your answers as much as possible.

1. (3 pts.) Solve the following equation:  $\frac{x+5}{3} = \frac{x}{2} + 2$
2. (3 pts.) Solve the equation  $6x + 3y = 8$  for the variable  $y$ .
3. (3 pts.) If you need to bike 90 miles and you can average a speed of 25 mph, how long will it take?
4. (2 pts.) Write an algebraic expression for each of the quantities being compared: In February, the average temperature in Seattle is  $8^{\circ}\text{F}$  more than the average February temperature in New York City.
5. (4 pts.) Construct an equation in order to solve the following: 2 more than a number is equal to the product of the same number and 9. Find the number.

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