

**Math 70 Quiz #5**  
**October 26, 2010**

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

Show all work and answers on a separate paper. Staple this sheet to your answers. Simplify your answers as much as possible. No calculators are permitted on this quiz.

1. Simplify the following as much as possible.

(a) (2 pts.)  $-4(-2t + 1)$ .

(b) (3 pts.)  $2(x^2 + 5x) - \frac{3}{4}(12x - 8)$

2. (2 pts.) Evaluate  $3x^2 - 1$  for  $x = \frac{1}{2}$ .

3. (3 pts.) Evaluate  $7a - a^2 + 5$  for  $a = -2$ .

4. (5 pts.) You buy fabric to make a triangular sail that will have an altitude of 10 feet and a base of 12 feet. If the material costs \$2.75 per square foot, how much will it cost for all of the fabric?

(Note: The area of a triangle is given by  $A = \frac{1}{2}bh$  with altitude =  $h$  and base =  $b$ .)