

Math 70 Quiz #5
October 27, 2009

Name: _____

Show all work on a separate sheet. Put a box around your final answer. No calculators are permitted.

1. (4 pts.) Simplify the following algebraic expressions using distribution or by combining like terms.

(a) (1 pt.) $5m^2 + 12m^2$

(b) (1 pt.) $7x - 3y - x + y$

(c) (2 pts.) $3a(a - 5) - 4a$

2. (2 pts.) Evaluate $4x^2 + x - 9$ for $x = -2$.

3. (4 pts.) You buy fabric to make a triangular sail for your sailboat. The sail will have an altitude of 15 feet and a base of 8 feet.

If the material costs \$4.50 per square foot, how much will it cost for all of the fabric?

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