

Math 71
Summer, 2009

Name _____

Homework #1
Due Wednesday, June 24

No late papers accepted! No excuses!

1. Simplify each expression. Leave no negative exponents in your answers.

a) $\left(\frac{-30a^{14}b^8}{10a^{17}b^{-2}}\right)^3$

b) $(-2x^{-4}y^5z^3)^{-4}$

c) $\left(\frac{x^{-3}}{y^5}\right)^{-4}$

2. The selling price of a scientific calculator is \$15. If the markup is 25% of the dealer's cost, what is the dealer's cost of the calculator?

3. The length of a rectangular pool is 6 meters less than twice the width. If the pool's perimeter is 126 meters, what are the dimensions?

4. Solve each equation.

a) $3(x - 4) + x = 2(6 + 2x)$

b) $\frac{2x - 3}{4} = \frac{x - 4}{2} - \frac{x + 1}{4}$