

Name: _____

Section: _____

MATH 120A

QUIZ 7

May 29, 2003

You may use a calculator to complete this quiz. No notes please. Show all work.

1. (5 points) Put the following equation in standard exponential form ($y = A_0b^x$):

$$y = 5 \left(\frac{1}{2} \right)^{3+4x}$$

2. (5 points) Recall the relationship between a human's height h (in inches), weight w (in pounds), and surface area S (in square meters):

$$S = 0.0104h^{0.425}w^{0.725}$$

Chris currently weighs 140 pounds and is 67 inches tall. Assuming Chris' height doesn't change, how much weight does Chris need to gain in order to increase surface area by 10%?