

Quiz 1

Show *all* your work. No credit is given without reasonable supporting work. There are *two* sides to this quiz.

1. [3] (§A.3 #58 & Fraction Wks #1) Simplify the following

$$\frac{2 - \frac{2}{x}}{1 + x}$$

$$\frac{\frac{4}{x-5}}{\frac{x}{(x-5)^3}}$$

2. [2] (WebHW1 #9) Perform

$$\frac{x}{x^2 - 9x + 8} - \frac{2}{2x - 16}$$

3. [2] (Dimensional Wks#2) You have a syringe with 150 mg of adenosine in 50 mL of solution. The MD has ordered a dose of .1 mg/kg for a 30kg pediatric patient. How many mL should you administer?

4. [3] (WebHW2 #7) The distance that a spring will stretch varies directly as the force applied to the spring. A force of 60 pounds is needed to stretch a spring 6 inches. What force is required to stretch the spring 10 inches?