MthU242 | Calculus II
Northeastern University | Professor Gilmore
Quiz #6 | Feb. 15, 2007
20 Minutes | Name:_____.

Show All Your Work

1. Consider the sequence $b_n = \dfrac{2n^3 + 1{,}000}{7{,}000{,}000 - 7n^2}$.

a. Does this sequence diverge, or converge? Give reasoning for your answer.

b. If it converges, give the number to which it converges, again, with reasoning to support your answer.

2. A spring has a natural length of 20 cms. If a 25 N. force is required to keep this spring extended at a length of 30 cms., how much work is required to stretch it from 20 to 25 cms?

Name:_____.