

Name: \_\_\_\_\_

Instructor: \_\_\_\_\_

**Math 10550, Supplemental Problems Exam 3**  
**November 15, 2011**

- The Honor Code is in effect for this examination. All work is to be your own.
- No calculators.
- The exam lasts for 1 hour and 15 min.
- Be sure that your name is on every page in case pages become detached.
- Be sure that you have all 2 pages of the test.

PLEASE MARK YOUR ANSWERS WITH AN X, not a circle!

**Please do NOT write in this box.**

Multiple Choice \_\_\_\_\_

2. \_\_\_\_\_

Total \_\_\_\_\_

Name: \_\_\_\_\_

Instructor: \_\_\_\_\_

### Multiple Choice

1.(6 pts.) Evaluate  $\lim_{x \rightarrow -\infty} \frac{\sqrt{4x^6 + 5}}{x^3 + 1}$ .

- (a)  $-2$       (b)  $2$       (c)  $6$       (d)  $3/2$       (e)  $4$

2.(10 pts.) The velocity of a particle (in meters per second) is given by

$$v(t) = 12 + 6t - 6t^2.$$

(a) What is the **displacement** of the particle over the interval  $[0, 3]$ ?

(b) What is the **distance** traveled by the particle over the interval  $[0, 3]$ ?

Name: \_\_\_\_\_

Instructor: ANSWERS

**Math 10550, Supplemental Problems Exam 3**  
**November 15, 2011**

- The Honor Code is in effect for this examination. All work is to be your own.
- No calculators.
- The exam lasts for 1 hour and 15 min.
- Be sure that your name is on every page in case pages become detached.
- Be sure that you have all 2 pages of the test.

PLEASE MARK YOUR ANSWERS WITH AN X, not a circle!

**Please do NOT write in this box.**

Multiple Choice \_\_\_\_\_

2. \_\_\_\_\_

Total \_\_\_\_\_