## Quiz

**Directions:** Carefully read each question below and answer to the best of your ability in the space provided. You MUST show your work to receive full credit!

1. (5 points) Consider the function

$$f(x) = \begin{cases} x^2 & x \le 1\\ -4x + 5 & x > 1 \end{cases}$$

Find  $\lim_{x \to 1} f(x)$ , if it exists. Hint: you may find it helpful to sketch the graph.

2. (5 points) Consider the function

$$g(x) = \begin{cases} x^2 & x \le 2\\ A - 5x & x > 2 \end{cases}$$

What value of A will make g(x) continuous at x = 2?

| Name:                 |     |     |     |     |
|-----------------------|-----|-----|-----|-----|
| Section (circle one): | 021 | 022 | 023 | 024 |

| Question: | 1 | 2 | Total |
|-----------|---|---|-------|
| Points:   | 5 | 5 | 10    |
| Score:    |   |   |       |