

## 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. Consider the function

$$f(x) = x^2 - 4x - 7.$$

- (a) (5 points) Find the instantaneous rate of change of  $f(x)$  when  $x = 2$ .

- (b) (5 points) Find a positive number  $A$  which is not equal to 1, so that the rate of change of  $f(x)$  from  $x = 1$  to  $x = A$  is equal to 3.

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

Section (circle one):            021            022            023            024

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