## Mathematics 122

Quiz \#8
Name:

Some values of a function $C=C(q)$ are given in the following table:

| $q$ | 1 | 3 | 5 | 7 |
| :---: | :---: | :---: | :---: | :---: |
| $C$ | 15 | 13 | 10 | 6 |

(1) Is this a linear function? Explain your answer.
(2) What is the average rate of change of $C$ between $q=1$ and $1=5$.
(3) Estimate $C^{\prime}(5)$

$$
C^{\prime}(5) \approx
$$

$\qquad$

