

Mathematics 122 Quiz #15

Name: _____

Let $C(t)$ be the cost/day to heat a house, starting at $t = 0$ on January 1, 1996. Assume that $C(t)$ is given by

$$C(t) = \begin{cases} 2.5, & 0 \leq t < 45 \\ 2.0, & 45 \leq t \leq 60. \end{cases}$$

1. What are the units on $\int_0^{60} C(t) dt$?

Units are _____

2. What is the interpretation of $\int_0^{60} C(t) dt$?

3. What is the average value of $C(t)$ on the interval $0 \leq t \leq 60$?

Average = _____