

2. (4 points) As an avid online music trader, your rate of transfer of mp3's is given by $m(t)$ measured in songs/hour where $t = 0$ corresponds to 5 pm. Explain the meaning of the quantity

$$\int_0^5 m(t) dt.$$

3. (8 points) Suppose $\int_{-3}^4 f(x) dx = 10$, $\int_0^4 f(x) dx = 2$, and that f is an **odd** function. For each of the following integrals fill in the answer in the space provided.

(a) $\int_{-3}^4 6f(x) dx = \underline{\hspace{2cm}}$

(b) $\int_{-3}^0 f(x) dx = \underline{\hspace{2cm}}$

(c) $\int_{-4}^0 f(x) dx = \underline{\hspace{2cm}}$

(d) $\int_{-4}^{-3} f(x) dx = \underline{\hspace{2cm}}$