

6. [9 points] Let $V(t)$ be the total number of tickets for a concert that have been sold (in thousands) t minutes after 8 pm.
- a. [2 points] There are only 2 million tickets for the concert on sale. Let $U(t)$ be the number of unsold tickets at t minutes after 8 pm. Find a formula for $U(t)$.

$$U(t) = \underline{\hspace{10em}}$$

- b. [2 points] Let $E(m)$ be the total number of tickets for the concert that have been sold (in thousands) m minutes **after 11 pm**. Find a formula for $E(m)$.

$$E(m) = \underline{\hspace{10em}}$$

- c. [2 points] Let $H(p)$ be the total number of tickets for the concert that have been sold (**in hundreds**) p **hours** after 8 pm. Find a formula for $H(p)$.

$$H(p) = \underline{\hspace{10em}}$$

- d. [3 points] Write an equation that represents the following fact: "*M minutes after 8 pm, the number of tickets sold was equal to a third of the tickets sold by 9 pm*".

Equation: $\underline{\hspace{10em}}$