2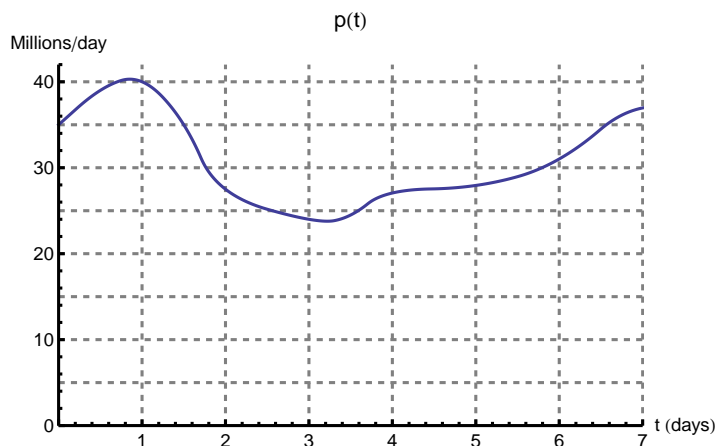. [12 points] Photo sharing through social networking sites has become increasingly popular over the years. Suppose $p(t)$ gives the rate at which photos are uploaded to Facebook's servers, over a certain one-week period, in millions of photos per day. ($t = 0$ corresponds to the beginning of Sunday.) A graph of $p(t)$ is given below.

a. [2 points] Write a definite integral that gives the total number of photos uploaded to Facebook from the beginning of Sunday through the end of Monday. Include units in your answer.

b. [8 points] Estimate the value of the definite integral in part (a) using LEFT(2), RIGHT(2), MID(2) and TRAP(2). Write each sum in terms of p.

c. [2 points] Give a real world interpretation of the quantity $\frac{1}{5} \int_1^6 p(t)dt$. Include units.