1. A rapidly traveling red-coated bicycle-borne mathematics professor is observed to decelerate from 10 m/s to 5 m/s in 3 seconds. Suppose that the mathematician travels 45 m before stopping (without speeding up). Carrie the Calculus Student thinks the professor stopped in 6 seconds, while Colin thinks it took 12 seconds. Is either of these two careful considerations of calculus computation clearly correct (or clearly incorrect)? Could the professor have taken less than 6 seconds or more than 12 seconds to stop? (4 points)

2. Suppose that the rate at which assignments appear as a function of the number of weeks, t, a student finds her or himself into the semester is given by $r(t) = e^{0.19t}$. How many assignments will this student get in the last week of class of the semester (the semester has 14 weeks of classes)? (3 points)

3. A function $f(x)$ is shown in the figure to the right. If $g'(x) = f(x)$, what can you say about $g(0)$? $g(1)$? $g(3) - g(1)$? (3 points)