Make a table to numerically estimate each limit. Use your table to help you decide either what the limit is, or that the limit does not exist.

1. $\lim_{x\to 0}\dfrac{e^x-1}{x}$
2. $\lim_{x\to 5}\dfrac{x-25}{5-\sqrt{x}}$
3. $\lim_{x\to 2}\dfrac{x^2+2x+1}{x-2}$

Make a table to numerically estimate each derivative:

4. $f'(2)$ for $f(x)=x^2+3x$
5. $f'(3)$ for $f(x)=\sqrt{x}$
6. $f'(-1)$ for $f(x)=3^x$

Use a subdivision with 8 parts to find a Riemann sum that will estimate each integral:

7. $\int_0^2 x^2+3\,dx$
8. $\int_1^5 \dfrac{12}{x}\,dx$