1. (1 pt) If we partition the interval \([-2, 5]\) into \(n\) subintervals, then each of length \(\Delta x\) is _________________ by means of the _________________ points.

2. (1 pt) The area of a(n) _________________ polygon underestimates the area of a region, whereas the area of a(n) _________________ polygon overestimates this area.

3. (1 pt) The distance traveled is the area of the region under the ________ curve.

4. (3 pts) In the following sub-problems, find the area of the indicated inscribed or circumscribed polygon.
   a) Problem #1, Page 233

   b) Problem #2, Page 233
5. (2 pts) Find the area of the region under the curve

\[ y = \frac{1}{2}x^2 + 1 \]

over the interval \([-1, 1]\). (HINT: To do this, divide the interval \([-1, 1]\) into \(n\) equal subintervals, calculate the area of the corresponding circumscribed polygon, and then let \(n \to \infty\).)

6. (2 pts) Suppose that an object is traveling along the t-axis in such a way that its velocity at time \(t\) seconds is \(v = t + 2\) feet per second. How far did it travel between \(t = 0\) and \(t = 1\)?