

1. What is the difference between a *definite* and an *indefinite* integral?
2. Can a *definite* or an *indefinite* integral be evaluated numerically?
3. Is it an approximation to say that “a definite integral over some interval is equal to the area under the curve of the integrand over that interval”?
4. What is the basic approximation made in the trapezoid integration rule?
5. For the same number of integration points, which do you expect to be more accurate, Simpson’s rule or the trapezoid rule?
6. Instead of approximating an area, what is the basic approximation in Gaussian quadrature?