Trapezoidal Approximations

Directions: Use a trapezoidal approximation to estimate the area under the curve. Use n subintervals (of equal length if possible).

1. $\int_0^4 x^3\,dx;\ n = 4$

2. $\int_0^\pi \sin x\,dx;\ n = 4$

3. $\int_2^5 \frac{x}{x-1}dx\,;\ n = 3$

4. $\int_1^7 f(x)\,dx;\ n = 3;$

x	1	2	3	4	5	6	7
$f(x)$	1	5	4	5	0	8	6

5. $\int_{-1}^7 g(x)\,dx;\ n = 4;$

x	-1	2	4	5	7
$g(x)$	3	4	6	2	10