Task card 1 Approximating Integrals: Riemann S...

The table gives values of a function f. Use a left Riemann sum with the 4 subintervals shown to approximate ∫ from 0 to 8 of f(x) dx.

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

Task card 2 Approximating Integrals: Riemann S...

The function f is increasing on [0, 5]. Will a right Riemann sum with n = 8 overestimate or underestimate ∫ from 0 to 5 of f(x) dx? (A) overestimate (B) underestimate

Task card 3 Approximating Integrals: Riemann S...

The table gives values of a function f. Use a right Riemann sum with the 3 subintervals shown to approximate ∫ from 2 to 8 of f(x) dx.

x	2	4	6	8
f(x)	6	12	16	22

Task card 4 Approximating Integrals: Riemann S...

The function f is decreasing on [3, 10]. Will a right Riemann sum with n = 4 overestimate or underestimate ∫ from 3 to 10 of f(x) dx? (A) overestimate (B) underestimate

Task card 5 Approximating Integrals: Riemann S...

The table gives values of a function f. Use a right Riemann sum with the 4 subintervals shown to approximate ∫ from 0 to 4 of f(x) dx.

x	0	1	2	3	4
f(x)	9	8	10	15	14

Task card 6 Approximating Integrals: Riemann S...

The function f is decreasing on [1, 5]. Will a right Riemann sum with n = 6 overestimate or underestimate ∫ from 1 to 5 of f(x) dx? (A) overestimate (B) underestimate

Task card 7 Approximating Integrals: Riemann S...

The table gives values of a function f. Use a right Riemann sum with the 3 subintervals shown to approximate ∫ from 2 to 5 of f(x) dx.

x	2	3	4	5
f(x)	8	10	12	17

Task card 8 Approximating Integrals: Riemann S...

The function f is decreasing on [1, 9]. Will a left Riemann sum with n = 5 overestimate or underestimate ∫ from 1 to 9 of f(x) dx? (A) overestimate (B) underestimate

Approximating Integrals: Riemann Sums & the Trapezoidal Rule Task Cards

Recording sheet · Grade 12 · Give each approximation as an exact number (a decimal such as 24.5 is fine). For overestimate or underestimate questions, answer with the letter A or B.

Scan to check your answers

Name: _____ Date: _____

1	2	3	4
5	6	7	8

Approximating Integrals: Riemann Sums & the Trapezoidal Rule Task Cards: Answer Key

Grade 12 · Easy

The answers online

1. 16	**2.** A	**3.** 100
4. B	**5.** 47	**6.** B
7. 39	**8.** A	