Task card 1 Definite Integrals & the Fundament...

Evaluate the definite integral ∫ from 0 to 1 of (4x + 5) dx.

Task card 2 Definite Integrals & the Fundament...

Evaluate the definite integral ∫ from 0 to 1 of (4x² + 5) dx.

Task card 3 Definite Integrals & the Fundament...

Evaluate the definite integral ∫ from 4 to 1 of (8x) dx.

Task card 4 Definite Integrals & the Fundament...

Evaluate the definite integral ∫ from 0 to 3 of (4x) dx.

Task card 5 Definite Integrals & the Fundament...

Given ∫ from -1 to 4 of f(x) dx = 5, find ∫ from -1 to 4 of -2f(x) dx.

Task card 6 Definite Integrals & the Fundament...

Evaluate the definite integral ∫ from 0 to 2 of (3x² + 3) dx.

Task card 7 Definite Integrals & the Fundament...

Evaluate the definite integral ∫ from 0 to 1 of $(3x^3)\,dx$.

Task card 8 Definite Integrals & the Fundament...

Given ∫ from 0 to 4 of $f(x)\,dx = -4$, find ∫ from 0 to 4 of $-2f(x)\,dx$.

Task card 9 Definite Integrals & the Fundament...

Evaluate the definite integral ∫ from 0 to 1 of $(3x + 3)\,dx$.

Task card 10 Definite Integrals & the Fundament...

Evaluate the definite integral ∫ from 0 to 1 of $(4x^3 + 1)\,dx$.

Task card 11 Definite Integrals & the Fundament...

Evaluate the definite integral ∫ from 3 to 0 of $(8x)\,dx$.

Task card 12 Definite Integrals & the Fundament...

Evaluate the definite integral ∫ from 0 to 2 of $(3x^2)\,dx$.

Task card 13 Definite Integrals & the Fundament...

Given $\int$ from 1 to 6 of f(x) dx = 4, find $\int$ from 6 to 1 of f(x) dx.

Task card 14 Definite Integrals & the Fundament...

Evaluate the definite integral $\int$ from 0 to 3 of (2x) dx.

Task card 15 Definite Integrals & the Fundament...

Evaluate the definite integral $\int$ from 2 to 0 of (8x + 2) dx.

Task card 16 Definite Integrals & the Fundament...

Evaluate the definite integral $\int$ from 0 to 3 of $(4x^2 + 3)$ dx.

Task card 17 Definite Integrals & the Fundament...

Evaluate the definite integral $\int$ from 1 to 3 of $(3x^2 + x + 6)$ dx.

Task card 18 Definite Integrals & the Fundament...

Given $\int$ from 3 to 8 of f(x) dx = 8 and $\int$ from 3 to 8 of g(x) dx = -2, find $\int$ from 3 to 8 of (4f(x) + 3g(x)) dx.

Task card 19 Definite Integrals & the Fundament...

Let $F(x) = \int$ from 1 to x of $(3t^2 + t)\,dt$. Find $F(1)$.

Task card 20 Definite Integrals & the Fundament...

Evaluate the definite integral $\int$ from 1 to 4 of $(x^2 - 4x + 4)\,dx$.

Task card 21 Definite Integrals & the Fundament...

A particle moves along a line with velocity $v(t) = 2t^2 + 5t - 4$ meters per second. Find its displacement (in meters) from $t = 1$ to $t = 2$.

Task card 22 Definite Integrals & the Fundament...

Given $\int$ from 1 to 4 of $f(x)\,dx = 6$ and $\int$ from 4 to 8 of $f(x)\,dx = 6$, find $\int$ from 1 to 8 of $f(x)\,dx$.

Task card 23 Definite Integrals & the Fundament...

Evaluate the definite integral $\int$ from 0 to 1 of $(x^2 - x - 4)\,dx$.

Task card 24 Definite Integrals & the Fundament...

Let $F(x) = \int$ from 0 to x of $(t^2 + 3t - 1)\,dt$. Find $F'(-3)$.

Definite Integrals & the Fundamental Theorem Task Cards

Recording sheet · Grade 12 · Give each answer as an exact number: a whole number or a fraction in simplest form, like 14/3 or -5/2.

Scan to check your answers

Name: _____ Date: _____

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24

Definite Integrals & the Fundamental Theorem Task Cards: Answer Key

Grade 12 · Easy

The answers online

1. 7	**2.** $\frac{19}{3}$	**3.** -60
4. 18	**5.** -10	**6.** 14
7. $\frac{3}{4}$	**8.** 8	**9.** $\frac{9}{2}$
10. 2	**11.** -36	**12.** 8
13. -4	**14.** 9	**15.** -20
16. 45	**17.** 42	**18.** 26
19. 0	**20.** 3	**21.** $\frac{49}{6}$
22. 12	**23.** $-\frac{25}{6}$	**24.** -1