Task card 1 Antiderivatives & Definite Integra...

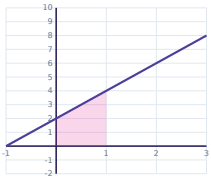
Find the antiderivative: $\int(12x^3 - 1)\,dx$

Task card 2 Antiderivatives & Definite Integra...

Evaluate the definite integral $\int$ from 2 to 4 of $(4x^3 - 9x^2)\,dx$.

Task card 3 Antiderivatives & Definite Integra...

Find the area of the shaded region under $y = 2x + 2$ from $x = 0$ to $x = 1$.



Task card 4 Antiderivatives & Definite Integra...

Evaluate the definite integral $\int$ from -2 to -1 of $(8x^3 + 2x)\,dx$.

Task card 5 Antiderivatives & Definite Integra...

Evaluate the definite integral $\int$ from -2 to 0 of $(8x^3 + 3)\,dx$.

Task card 6 Antiderivatives & Definite Integra...

Evaluate the definite integral $\int$ from 2 to 3 of $(-8x^3 - 2x)\,dx$.

Task card 7 Antiderivatives & Definite Integra...

Evaluate the definite integral $\int$ from -2 to 1 of $(4x^3 + 4x)\,dx$.

Task card 8 Antiderivatives & Definite Integra...

Evaluate the definite integral $\int$ from 0 to 1 of $(8x^3 - 6x^2)\,dx$.

Task card 9 Antiderivatives & Definite Integra...

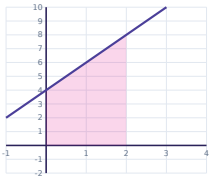
Find the antiderivative: $\int(-5x^4 - 4x^3)\,dx$

Task card 10 Antiderivatives & Definite Integra...

Evaluate the definite integral $\int$ from -2 to 0 of $(5x^4 + 8x^3)\,dx$.

Task card 11 Antiderivatives & Definite Integra...

Find the area of the shaded region under $y = 2x + 4$ from $x = 0$ to $x = 2$.

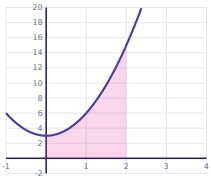


Task card 12 Antiderivatives & Definite Integra...

Evaluate the definite integral $\int$ from 2 to 3 of $(-5x^4 + 4x)\,dx$.

Task card 13 Antiderivatives & Definite Integra...

Find the area of the shaded region under $y = 3x^2 + 3$ from $x = 0$ to $x = 2$.

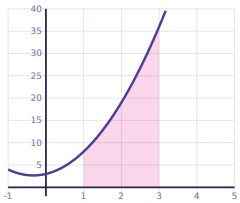


Task card 14 Antiderivatives & Definite Integra...

Evaluate the definite integral $\int$ from 0 to 2 of $(5x^4 + 6x^2)\,dx$.

Task card 15 Antiderivatives & Definite Integra...

Find the area of the shaded region under $y = 3x^2 + 2x + 3$ from $x = 1$ to $x = 3$.



Task card 16 Antiderivatives & Definite Integra...

Evaluate the definite integral $\int$ from 1 to 4 of $(15x^4 + 4x^3 + 2x)\,dx$.

Task card 17 Antiderivatives & Definite Integra...

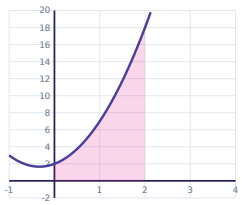
Find the antiderivative: $\int(10x^4 + 3)\,dx$

Task card 18 Antiderivatives & Definite Integra...

Evaluate the definite integral $\int$ from 2 to 3 of $(5x^4 - 6x)\,dx$.

Task card 19 Antiderivatives & Definite Integra...

Find the area of the shaded region under $y = 3x^2 + 2x + 2$ from $x = 0$ to $x = 2$.



Task card 20 Antiderivatives & Definite Integra...

Evaluate the definite integral $\int$ from 1 to 3 of $(5x^4 + 6x^2 + 3)\,dx$.

Task card 21 Antiderivatives & Definite Integra...

$f'(x) = -4x^3 + 3x^2$ and $f(2) = -11$. Find $f(0)$.

Task card 22 Antiderivatives & Definite Integra...

Find the antiderivative: $\int(10x^4 - 4x)\,dx$

Task card 23 Antiderivatives & Definite Integra...

Evaluate the definite integral $\int$ from 1 to 4 of $(-5x^4 + 8x^3 - 2)\,dx$.

Task card 24 Antiderivatives & Definite Integra...

Find the antiderivative: $\int(-12x^3 - 1)\,dx$

Antiderivatives & Definite Integrals Task Cards

Recording sheet · Grade 12 · For an antiderivative, include + C (like x^3 + 2x + C). For a definite integral or area, give the number.

Name: _____ Date: _____

Scan to check your answers

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

Antiderivatives & Definite Integrals Task Cards: Answer Key

Grade 12 · Medium

The answers online

1. $3x^4 - x + C$	**2.** 72	**3.** 3
4. -33	**5.** -26	**6.** -135
7. -21	**8.** 0	**9.** $-x^5 - x^4 + C$
10. 0	**11.** 12	**12.** -201
13. 14	**14.** 48	**15.** 40
16. 3339	**17.** $2x^5 + 3x + C$	**18.** 196
19. 16	**20.** 300	**21.** -3
22. $2x^5 - 2x^2 + C$	**23.** -519	**24.** $-3x^4 - x + C$