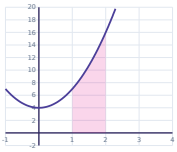
Find the antiderivative: $\int(2x)\,dx$

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

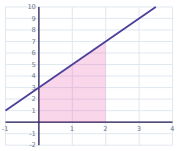
Evaluate the definite integral $\int$ from 0 to 1 of $(6x)\,dx$.

Find the area of the shaded region under $y = 3x^2 + 4$ from $x = 1$ to $x = 2$.

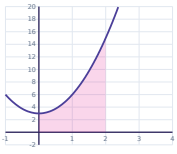


Find the antiderivative: $\int(9x^2)\,dx$

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



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



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

Antiderivatives & Definite Integrals · 2

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$x^4 + C$

Antiderivatives & Definite Integrals · 1

ANSWER

$x^2 + C$

Antiderivatives & Definite Integrals · 4

ANSWER

11

Antiderivatives & Definite Integrals · 3

ANSWER

3

Antiderivatives & Definite Integrals · 6

ANSWER

10

Antiderivatives & Definite Integrals · 5

ANSWER

$3x^3 + C$

Antiderivatives & Definite Integrals · 8

ANSWER

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Antiderivatives & Definite Integrals · 7

ANSWER

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Find the antiderivative:

$\int(6x^2 + 4x)\,dx$

Find the antiderivative:

$\int(9x^2 + 2x)\,dx$

Evaluate the definite integral $\int$ from 2 to 5 of $(9x^2 + 2x)\,dx$.

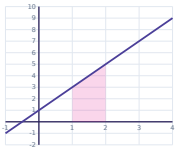
Find the antiderivative:

$\int(6x^2 + 1)\,dx$

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

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

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



Find the antiderivative:

$\int(8x^3 + 2)\,dx$

Antiderivatives & Definite Integrals · 10

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$3x^3 + x^2 + C$

Antiderivatives & Definite Integrals · 9

ANSWER

$2x^3 + 2x^2 + C$

Antiderivatives & Definite Integrals · 12

ANSWER

$2x^3 + x + C$

Antiderivatives & Definite Integrals · 11

ANSWER

372

Antiderivatives & Definite Integrals · 14

ANSWER

120

Antiderivatives & Definite Integrals · 13

ANSWER

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Antiderivatives & Definite Integrals · 16

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$2x^4 + 2x + C$

Antiderivatives & Definite Integrals · 15

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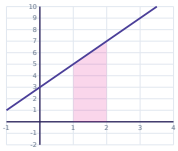
Antiderivatives & Definite Integrals · 17

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

Antiderivatives & Definite Integrals · 18

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

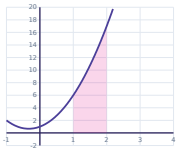


Antiderivatives & Definite Integrals · 19

Evaluate the definite integral ∫ from 2 to 4 of $(12x^3 + 6x^2)\,dx$.

Antiderivatives & Definite Integrals · 20

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



Antiderivatives & Definite Integrals · 21

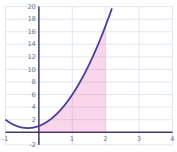
Find the antiderivative: $\int(-8x^3 + 1)\,dx$

Antiderivatives & Definite Integrals · 22

Find the antiderivative: $\int(4x^3 + 6x)\,dx$

Antiderivatives & Definite Integrals · 23

Find the area of the shaded region under $y = 3x^2 + 2x + 1$ from $x = 0$ to $x = 2$.



Antiderivatives & Definite Integrals · 24

Find the antiderivative: $\int(8x^3)\,dx$

Antiderivatives & Definite Integrals · 18

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Antiderivatives & Definite Integrals · 17

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Antiderivatives & Definite Integrals · 20

ANSWER

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Antiderivatives & Definite Integrals · 19

ANSWER

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Antiderivatives & Definite Integrals · 22

ANSWER

$x^4 + 3x^2 + C$

Antiderivatives & Definite Integrals · 21

ANSWER

$-2x^4 + x + C$

Antiderivatives & Definite Integrals · 24

ANSWER

$2x^4 + C$

Antiderivatives & Definite Integrals · 23

ANSWER

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