Antiderivatives & Definite Integrals · 1

Find the antiderivative: $\int(15x^4 + 12x^3 + 2)\,dx$

Antiderivatives & Definite Integrals · 2

Evaluate the definite integral $\int$ from 2 to 5 of $(-15x^4 - 8x^3 + 2)\,dx$.

Antiderivatives & Definite Integrals · 3

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



Antiderivatives & Definite Integrals · 4

Evaluate the definite integral $\int$ from -2 to 1 of $(5x^4 - 9x^2 + 4x)\,dx$.

Antiderivatives & Definite Integrals · 5

$f'(x) = -8x^3 + 6x^2$ and $f(2) = -14$. Find $f(0)$.

Antiderivatives & Definite Integrals · 6

Evaluate the definite integral $\int$ from -2 to 1 of $(5x^4 + 12x^3 - 3x^2)\,dx$.

Antiderivatives & Definite Integrals · 7

Evaluate the definite integral $\int$ from -2 to -1 of $(5x^4 + 8x^3 + 9x^2)\,dx$.

Antiderivatives & Definite Integrals · 8

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

Antiderivatives & Definite Integrals · 2

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-10491

Antiderivatives & Definite Integrals · 1

ANSWER

$3x^5 + 3x^4 + 2x + C$

Antiderivatives & Definite Integrals · 4

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0

Antiderivatives & Definite Integrals · 3

ANSWER

4

Antiderivatives & Definite Integrals · 6

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-21

Antiderivatives & Definite Integrals · 5

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2

Antiderivatives & Definite Integrals · 8

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2

Antiderivatives & Definite Integrals · 7

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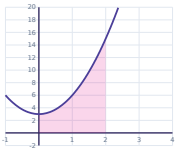
22

Find the antiderivative:

$\int(-10x^4 + 2x + 3)\,dx$

Evaluate the definite integral $\int$ from 1 to 2 of $(-10x^4 + 3x^2 + 1)\,dx$.

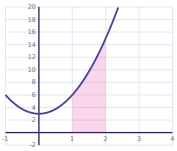
Find the area of the shaded region under $y = 3x^2 + 3$ from $x = 0$ to $x = 2$.



Evaluate the definite integral $\int$ from 1 to 3 of $(-15x^4 + 9x^2 - 2)\,dx$.

$f'(x) = 12x^3 - 2$ and $f(1) = -7$. Find $f(0)$.

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



$f'(x) = 12x^3 + 3x^2$ and $f(2) = 55$. Find $f(0)$.

Evaluate the definite integral $\int$ from 2 to 4 of $(-10x^4 - 4x^3 - 6x)\,dx$.

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-54

Antiderivatives & Definite Integrals · 9

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$-2x^5 + x^2 + 3x + C$

Antiderivatives & Definite Integrals · 12

ANSWER

-652

Antiderivatives & Definite Integrals · 11

ANSWER

14

Antiderivatives & Definite Integrals · 14

ANSWER

10

Antiderivatives & Definite Integrals · 13

ANSWER

-8

Antiderivatives & Definite Integrals · 16

ANSWER

-2260

Antiderivatives & Definite Integrals · 15

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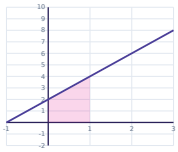
-1

Find the antiderivative:

$\int(-15x^4 - 12x^3 - 1)\,dx$

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

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



Evaluate the definite integral $\int$ from -1 to 1 of $(-10x^4 - 9x^2)\,dx$.

$f'(x) = 8x^3 + 6x$ and $f(1) = 1$. Find $f(0)$.

Find the antiderivative:

$\int(15x^4 - 8x^3)\,dx$

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

Find the antiderivative:

$\int(10x^4 + 3x^2 - 1)\,dx$

Antiderivatives & Definite Integrals · 18

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-36

Antiderivatives & Definite Integrals · 17

ANSWER

$-3x^5 - 3x^4 - x + C$

Antiderivatives & Definite Integrals · 20

ANSWER

-10

Antiderivatives & Definite Integrals · 19

ANSWER

3

Antiderivatives & Definite Integrals · 22

ANSWER

$3x^5 - 2x^4 + C$

Antiderivatives & Definite Integrals · 21

ANSWER

-4

Antiderivatives & Definite Integrals · 24

ANSWER

$2x^5 + x^3 - x + C$

Antiderivatives & Definite Integrals · 23

ANSWER

2944