Derivatives: The Power Rule · 1

Find f'(x) for f(x) = $-2x^3 + 5x - 8x^{-2}$.

Derivatives: The Power Rule · 2

Find f'(x) for f(x) = $x^2 - 8x^{-3}$.

Derivatives: The Power Rule · 3

f(x) = $-3x^4 - 5x + 2x^{-3}$. Find f'(-2).

Derivatives: The Power Rule · 4

Find f'(x) for f(x) = $5x^3 - 2x + 6x^{-2}$.

Derivatives: The Power Rule · 5

Find f'(x) for f(x) = $2x^3 + 3x - x^{-3}$.

Derivatives: The Power Rule · 6

f(x) = $-6x^4 - 8x^{-2}$. Find f'(2).

Derivatives: The Power Rule · 7

Find f'(x) for f(x) = $2x^3 + 5x - 3x^{-2}$.

Derivatives: The Power Rule · 8

Find f'(x) for f(x) = $4x^2 - 2x - 7x^{-3}$.

Derivatives: The Power Rule · 2

ANSWER

$$2x + 24x^{-4}$$

Derivatives: The Power Rule · 1

ANSWER

$$-6x^2 + 5 + 16x^{-3}$$

Derivatives: The Power Rule · 4

ANSWER

$$15x^2 - 2 - 12x^{-3}$$

Derivatives: The Power Rule · 3

ANSWER

$$\frac{725}{8}$$

Derivatives: The Power Rule · 6

ANSWER

$$-190$$

Derivatives: The Power Rule · 5

ANSWER

$$6x^2 + 3 + 3x^{-4}$$

Derivatives: The Power Rule · 8

ANSWER

$$8x - 2 + 21x^{-4}$$

Derivatives: The Power Rule · 7

ANSWER

$$6x^2 + 5 + 6x^{-3}$$

Find f'(x) for f(x) = $-x^2 + x + 7x^{-2}$.

Find f'(x) for f(x) = $x^3 + 7x^{-1}$.

$f(x) = 4x^3 - 4x^{-1}$.

Find f'(-1).

Find f'(x) for f(x) = $6x^3 + x - 7x^{-2}$.

Find f'(x) for f(x) = $-4x^2 + x^{-3}$.

$f(x) = -2x^3 + 2x^{-2}$.

Find f'(2).

Find f'(x) for f(x) = $5x^2 - 9x + 2x^{-1}$.

Find f'(x) for f(x) = $3x^4 - 4x^{-2}$.

Derivatives: The Power Rule · 10

ANSWER

$$3x^2 - 7x^{-2}$$

Derivatives: The Power Rule · 9

ANSWER

$$-2x + 1 - 14x^{-3}$$

Derivatives: The Power Rule · 12

ANSWER

$$18x^2 + 1 + 14x^{-3}$$

Derivatives: The Power Rule · 11

ANSWER

$$16$$

Derivatives: The Power Rule · 14

ANSWER

$$\frac{49}{-2}$$

Derivatives: The Power Rule · 13

ANSWER

$$-8x - 3x^{-4}$$

Derivatives: The Power Rule · 16

ANSWER

$$12x^3 + 8x^{-3}$$

Derivatives: The Power Rule · 15

ANSWER

$$10x - 9 - 2x^{-2}$$

Find f'(x) for f(x) = $-2x^2 - 5x^{-3}$.

Find f'(x) for f(x) = $-4x^3 + 5x^{-1}$.

$f(x) = -3x^2 + 4x^{-1}$. Find f'(-2).

Find f'(x) for f(x) = $6x^3 + 2x - 4x^{-2}$.

Find f'(x) for f(x) = $5x^3 - 2x^{-1}$.

$f(x) = x^4 + 8x + 4x^{-2}$. Find f'(-1).

Find f'(x) for f(x) = $-x^2 - 7x^{-3}$.

Find f'(x) for f(x) = $-x^4 - 3x^{-2}$.

Derivatives: The Power Rule · 18

ANSWER

$-12x^2 - 5x^{-2}$

Derivatives: The Power Rule · 17

ANSWER

$-4x + 15x^{-4}$

Derivatives: The Power Rule · 20

ANSWER

$18x^2 + 2 + 8x^{-3}$

Derivatives: The Power Rule · 19

ANSWER

11

Derivatives: The Power Rule · 22

ANSWER

12

Derivatives: The Power Rule · 21

ANSWER

$15x^2 + 2x^{-2}$

Derivatives: The Power Rule · 24

ANSWER

$-4x^3 + 6x^{-3}$

Derivatives: The Power Rule · 23

ANSWER

$-2x + 21x^{-4}$