Task card 1 Derivatives: The Power Rule

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

Task card 2 Derivatives: The Power Rule

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

Task card 3 Derivatives: The Power Rule

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

Task card 4 Derivatives: The Power Rule

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

Task card 5 Derivatives: The Power Rule

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

Task card 6 Derivatives: The Power Rule

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

Task card 7 Derivatives: The Power Rule

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

Task card 8 Derivatives: The Power Rule

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

Task card 9 Derivatives: The Power Rule

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

Task card 10 Derivatives: The Power Rule

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

Task card 11 Derivatives: The Power Rule

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

Find f'(-1).

Task card 12 Derivatives: The Power Rule

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

Task card 13 Derivatives: The Power Rule

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

Task card 14 Derivatives: The Power Rule

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

Task card 15 Derivatives: The Power Rule

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

Task card 16 Derivatives: The Power Rule

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

Task card 17 Derivatives: The Power Rule

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

Task card 18 Derivatives: The Power Rule

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

Task card 19 Derivatives: The Power Rule

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

Task card 20 Derivatives: The Power Rule

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

Task card 21 Derivatives: The Power Rule

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

Task card 22 Derivatives: The Power Rule

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

Task card 23 Derivatives: The Power Rule

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

Task card 24 Derivatives: The Power Rule

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

Derivatives: The Power Rule Task Cards

Recording sheet · Grade 12 · Find f'(x) — write just the expression, like 6x^2 - 4 — or the number asked for.

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

Derivatives: The Power Rule Task Cards: Answer Key

Grade 12 · Hard

The answers online

1. $-6x^2 + 5 + 16x^{-3}$	**2.** $2x + 24x^{-4}$	**3.** $\frac{725}{8}$
4. $15x^2 - 2 - 12x^{-3}$	**5.** $6x^2 + 3 + 3x^{-4}$	**6.** -190
7. $6x^2 + 5 + 6x^{-3}$	**8.** $8x - 2 + 21x^{-4}$	**9.** $-2x + 1 - 14x^{-3}$
10. $3x^2 - 7x^{-2}$	**11.** 16	**12.** $18x^2 + 1 + 14x^{-3}$
13. $-8x - 3x^{-4}$	**14.** $-\frac{49}{2}$	**15.** $10x - 9 - 2x^{-2}$
16. $12x^3 + 8x^{-3}$	**17.** $-4x + 15x^{-4}$	**18.** $-12x^2 - 5x^{-2}$
19. 11	**20.** $18x^2 + 2 + 8x^{-3}$	**21.** $15x^2 + 2x^{-2}$
22. 12	**23.** $-2x + 21x^{-4}$	**24.** $-4x^3 + 6x^{-3}$