Task card 1 Derivatives: The Power Rule

Find f'(x) for f(x) = $4x^5 - x^3$.

Task card 2 Derivatives: The Power Rule

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

Task card 3 Derivatives: The Power Rule

$f(x) = 7x^5 + 7x^4 + 1$. Find f'(1).

Task card 4 Derivatives: The Power Rule

Find f'(x) for f(x) = $8x^5 + 3x^3$.

Task card 5 Derivatives: The Power Rule

Find f'(x) for $f(x) = x^5 + 9x^4 - x$.

Task card 6 Derivatives: The Power Rule

$f(x) = 8x^5 - 6x^3 - 8$. Find f'(3).

Task card 7 Derivatives: The Power Rule

Find f'(x) for $f(x) = -7x^5 - 8x^4 - 3$.

Task card 8 Derivatives: The Power Rule

Find f'(x) for $f(x) = 6x^5 + 6$.

Task card 9 Derivatives: The Power Rule

Find f'(x) for $f(x) = 6x^5 + x^4$.

Task card 10 Derivatives: The Power Rule

Find f'(x) for $f(x) = 4x^5 + x^3 + 7x^2$.

Task card 11 Derivatives: The Power Rule

$f(x) = -9x^5 - 3x^4$.

Find f'(-1).

Task card 12 Derivatives: The Power Rule

Find f'(x) for $f(x) = -5x^5 - 4x^4 - 3x^2$.

Task card 13 Derivatives: The Power Rule

Find f'(x) for $f(x) = -x^5 - 5x^4 + x$.

Task card 14 Derivatives: The Power Rule

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

Task card 15 Derivatives: The Power Rule

Find f'(x) for $f(x) = 6x^5 + 9x^2 - 8$.

Task card 16 Derivatives: The Power Rule

Find f'(x) for $f(x) = -8x^5 - 2x^2$.

Task card 17 Derivatives: The Power Rule

Find f'(x) for $f(x) = -9x^5 + 8x^3 - 6x$.

Task card 18 Derivatives: The Power Rule

Find f'(x) for $f(x) = -9x^5 + 9x^3 + 6$.

Task card 19 Derivatives: The Power Rule

$f(x) = 6x^5 - 5x^3 - 8$. Find $f'(0)$.

Task card 20 Derivatives: The Power Rule

Find $f'(x)$ for $f(x) = -7x^5 - 4x^4 - 6x^3$.

Task card 21 Derivatives: The Power Rule

Find $f'(x)$ for $f(x) = 4x^5 - 6x^4 + 5x^2$.

Task card 22 Derivatives: The Power Rule

$f(x) = -6x^5 + 2x^3$. Find $f'(0)$.

Task card 23 Derivatives: The Power Rule

Find $f'(x)$ for $f(x) = 7x^5 + 6x^3 + 9x^2 - 8$.

Task card 24 Derivatives: The Power Rule

Find $f'(x)$ for $f(x) = -6x^5 - x^4 + 6x^2 + 6x$.

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 · Medium

The answers online

1. $20x^4 - 3x^2$	**2.** $10x^4 + 6x^2$	**3.** 63
4. $40x^4 + 9x^2$	**5.** $5x^4 + 36x^3 - 1$	**6.** 3078
7. $-35x^4 - 32x^3$	**8.** $30x^4$	**9.** $30x^4 + 4x^3$
10. $20x^4 + 3x^2 + 14x$	**11.** -33	**12.** $-25x^4 - 16x^3 - 6x$
13. $-5x^4 - 20x^3 + 1$	**14.** 325	**15.** $30x^4 + 18x$
16. $-40x^4 - 4x$	**17.** $-45x^4 + 24x^2 - 6$	**18.** $-45x^4 + 27x^2$
19. 0	**20.** $-35x^4 - 16x^3 - 18x^2$	**21.** $20x^4 - 24x^3 + 10x$
22. 0	**23.** $35x^4 + 18x^2 + 18x$	**24.** $-30x^4 - 4x^3 + 12x + 6$