Task card 1 Derivatives: The Power Rule

Find f'(x) for f(x) = x^5.

Task card 2 Derivatives: The Power Rule

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

Task card 3 Derivatives: The Power Rule

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

Task card 4 Derivatives: The Power Rule

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

Task card 5 Derivatives: The Power Rule

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

Task card 6 Derivatives: The Power Rule

Find f'(x) for f(x) = $6x^3$.

Task card 7 Derivatives: The Power Rule

Find f'(x) for f(x) = $-9x^2$.

Task card 8 Derivatives: The Power Rule

Find f'(x) for f(x) = $8x^4$.

Task card 9 Derivatives: The Power Rule

Find f'(x) for f(x) = $6x^3 - 2x$.

Task card 10 Derivatives: The Power Rule

f(x) = $-6x^3$. Find f'(1).

Task card 11 Derivatives: The Power Rule

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

Task card 12 Derivatives: The Power Rule

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

Task card 13 Derivatives: The Power Rule

$f(x) = 4x^3 + 2$.

Find $f'(-3)$.

Task card 14 Derivatives: The Power Rule

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

Task card 15 Derivatives: The Power Rule

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

Task card 16 Derivatives: The Power Rule

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

Task card 17 Derivatives: The Power Rule

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

Task card 18 Derivatives: The Power Rule

$f(x) = -5x^4 - 6x^2$.

Find $f'(3)$.

Task card 19 Derivatives: The Power Rule

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

Task card 20 Derivatives: The Power Rule

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

Task card 21 Derivatives: The Power Rule

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

Find f'(-2).

Task card 22 Derivatives: The Power Rule

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

Task card 23 Derivatives: The Power Rule

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

Task card 24 Derivatives: The Power Rule

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

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 · Easy

The answers online

1. $5x^4$	**2.** $-24x^3$	**3.** $-16x$
4. $-12x^5$	**5.** $-15x^2$	**6.** $18x^2$
7. $-18x$	**8.** $32x^3$	**9.** $18x^2 - 2$
10. -18	**11.** $-3x^2 + 6x$	**12.** $-15x^2$
13. 108	**14.** $-15x^2$	**15.** $-12x^2$
16. $8x^3 - 12x^2$	**17.** $-8x^3 + 6$	**18.** -576
19. $20x^3$	**20.** $12x^3$	**21.** -76
22. $-4x^3$	**23.** $8x^3 + 2$	**24.** $-18x^2$