Task card 1 Product, Quotient & Chain Rules

$$f(x) = \frac{-x^2 - x}{-x - 1}$$. Use the quotient rule to find f'(2).

Task card 2 Product, Quotient & Chain Rules

$f(x) = \sqrt{(2x^2 + 4x - 2)}$. Use the chain rule to find f'(-3).

Task card 3 Product, Quotient & Chain Rules

$f(x) = e^{-x}$. Use the chain rule to find f'(0).

Task card 4 Product, Quotient & Chain Rules

$f(x) = x^3(x + 1)^3$. Find f'(2).

Task card 5 Product, Quotient & Chain Rules

$$f(x) = \frac{-x^2 + 2x + 6}{x - 1}$$. Use the quotient rule to find f'(3).

Task card 6 Product, Quotient & Chain Rules

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

Task card 7 Product, Quotient & Chain Rules

$f(x) = \frac{3x + 2}{2x - 3}$. Use the quotient rule to find f'(-3).

Task card 8 Product, Quotient & Chain Rules

$f(x) = \frac{3x^2 + 3x - 2}{-2x - 1}$. Use the quotient rule to find f'(-1).

Task card 9 Product, Quotient & Chain Rules

$f(x) = \frac{x - 1}{-x + 6}$. Use the quotient rule to find f'(-1).

Task card 10 Product, Quotient & Chain Rules

$f(x) = \sqrt{(x^2 - 2x + 6)}$. Use the chain rule to find f'(3).

Task card 11 Product, Quotient & Chain Rules

$f(x) = e^{x^2+x-2}$. Use the chain rule to find f'(-2).

Task card 12 Product, Quotient & Chain Rules

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

Task card 13 Product, Quotient & Chain Rules

$f(x) = \frac{2x}{-2x + 4}$. Use the quotient rule to find f'(3).

Task card 14 Product, Quotient & Chain Rules

$f(x) = x^2(x - 3)^3$. Find f'(1).

Task card 15 Product, Quotient & Chain Rules

$f(x) = \sqrt{(x^2 + 4x + 1)}$. Use the chain rule to find f'(0).

Task card 16 Product, Quotient & Chain Rules

$f(x) = \frac{2x + 3}{-2x - 3}$. Use the quotient rule to find f'(-3).

Task card 17 Product, Quotient & Chain Rules

$f(x) = \frac{-x^2 + 4x}{3x - 2}$. Use the quotient rule to find f'(2).

Task card 18 Product, Quotient & Chain Rules

$f(x) = \sqrt{(2x^2 + x + 3)}$. Use the chain rule to find f'(-1).

Task card 19 Product, Quotient & Chain Rules

$f(x) = e^{x+1}$. Use the chain rule to find f'(-1).

Task card 20 Product, Quotient & Chain Rules

$f(x) = x^2(x - 2)^2$. Find f'(-1).

Task card 21 Product, Quotient & Chain Rules

$f(x) = \frac{x + 1}{-2x - 2}$. Use the quotient rule to find f'(-3).

Task card 22 Product, Quotient & Chain Rules

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

Task card 23 Product, Quotient & Chain Rules

$f(x) = \sqrt{(2x^2 + 2)}$. Use the chain rule to find f'(1).

Task card 24 Product, Quotient & Chain Rules

$f(x) = \frac{-2x + 2}{x + 5}$. Use the quotient rule to find f'(0).

Product, Quotient & Chain Rules Task Cards

Recording sheet · Grade 12 · Find the value of the derivative at the given point. Give fractions in simplest form.

Scan to check your answers

Name: _____ Date: _____

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24

Product, Quotient & Chain Rules Task Cards: Answer Key

Grade 12 · Hard

The answers online

1. 1	**2.** -2	**3.** -1
4. 540	**5.** $-\frac{11}{4}$	**6.** 60
7. $-\frac{13}{81}$	**8.** -7	**9.** $\frac{5}{49}$
10. $\frac{2}{3}$	**11.** -3	**12.** 108
13. 2	**14.** -4	**15.** 2
16. 0	**17.** $-\frac{3}{4}$	**18.** $-\frac{3}{4}$
19. 1	**20.** -24	**21.** 0
22. -560	**23.** 1	**24.** $-\frac{12}{25}$