Task card 1 Product, Quotient & Chain Rules

$f(x) = (3x^2 - 2x + 6)(2x + 1)$. Use the product rule to find $f'(-3)$.

Task card 2 Product, Quotient & Chain Rules

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

Task card 3 Product, Quotient & Chain Rules

$f(x) = (-2x^2 - 2x + 4)^5$. Use the chain rule to find $f'(-1)$.

Task card 4 Product, Quotient & Chain Rules

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

Task card 5 Product, Quotient & Chain Rules

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

Task card 6 Product, Quotient & Chain Rules

$f(x) = \frac{-x^2 - 4x - 4}{-2x + 1}$. Use the quotient rule to find $f'(1)$.

Task card 7 Product, Quotient & Chain Rules

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

Task card 8 Product, Quotient & Chain Rules

$f(x) = (-2x + 3)^5$. Use the chain rule to find $f'(1)$.

Task card 9 Product, Quotient & Chain Rules

$f(x) = (3x^2 + 3x + 6)(x + 6)$. Use the product rule to find $f'(1)$.

Task card 10 Product, Quotient & Chain Rules

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

Task card 11 Product, Quotient & Chain Rules

$f(x) = (-x + 4)^5$. Use the chain rule to find $f'(1)$.

Task card 12 Product, Quotient & Chain Rules

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

Task card 13 Product, Quotient & Chain Rules

$f(x) = e^{-3x}$. Use the chain rule to find f'(0).

Task card 14 Product, Quotient & Chain Rules

$f(x) = e^{x^2+5x+4}$. Use the chain rule to find f'(-4).

Task card 15 Product, Quotient & Chain Rules

$f(x) = \sqrt{(2x^2 - 3x - 4)}$. Use the chain rule to find f'(-1).

Task card 16 Product, Quotient & Chain Rules

$f(x) = (x^2 + 4x - 2)(x + 4)$. Use the product rule to find f'(-2).

Task card 17 Product, Quotient & Chain Rules

$f(x) = (x^2 - 2x - 2)(-2x + 2)$. Use the product rule to find f'(0).

Task card 18 Product, Quotient & Chain Rules

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

Task card 19 Product, Quotient & Chain Rules

$f(x) = (3x + 1)^4$. Use the chain rule to find $f'(-1)$.

Task card 20 Product, Quotient & Chain Rules

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

Task card 21 Product, Quotient & Chain Rules

$f(x) = e^{-x-4}$. Use the chain rule to find $f'(-4)$.

Task card 22 Product, Quotient & Chain Rules

$f(x) = e^{3x+12}$. Use the chain rule to find $f'(-4)$.

Task card 23 Product, Quotient & Chain Rules

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

Task card 24 Product, Quotient & Chain Rules

$f(x) = (x^2 - 3x - 4)^5$. Use the chain rule to find $f'(-1)$.

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.

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

Product, Quotient & Chain Rules Task Cards: Answer Key

Grade 12 · Medium

The answers online

1. 178	**2.** $\frac{11}{64}$	**3.** 2560
4. 4	**5.** $\frac{7}{8}$	**6.** -12
7. $\frac{7}{-4}$	**8.** -10	**9.** 75
10. 1	**11.** -405	**12.** $\frac{9}{-4}$
13. -3	**14.** -3	**15.** $\frac{7}{-2}$
16. -6	**17.** 0	**18.** 1
19. -96	**20.** $\frac{3}{-2}$	**21.** -1
22. 3	**23.** -4	**24.** 0