Product, Quotient & Chain Rules · 1

$f(x) = (-x^2 + 4x - 6)(3x - 1)$. Use the product rule to find $f'(-2)$.

Product, Quotient & Chain Rules · 2

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

Product, Quotient & Chain Rules · 3

$f(x) = (-2x^2 - x + 3)(x + 4)$. Use the product rule to find $f'(-2)$.

Product, Quotient & Chain Rules · 4

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

Product, Quotient & Chain Rules · 5

$f(x) = (x + 1)^3$. Use the chain rule to find $f'(0)$.

Product, Quotient & Chain Rules · 6

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

Product, Quotient & Chain Rules · 7

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

Product, Quotient & Chain Rules · 8

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

Product, Quotient & Chain Rules · 2

ANSWER

96

Product, Quotient & Chain Rules · 1

ANSWER

-110

Product, Quotient & Chain Rules · 4

ANSWER

486

Product, Quotient & Chain Rules · 3

ANSWER

11

Product, Quotient & Chain Rules · 6

ANSWER

-36

Product, Quotient & Chain Rules · 5

ANSWER

3

Product, Quotient & Chain Rules · 8

ANSWER

8

Product, Quotient & Chain Rules · 7

ANSWER

-6

Product, Quotient & Chain Rules · 9

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

Product, Quotient & Chain Rules · 10

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

Product, Quotient & Chain Rules · 11

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

Product, Quotient & Chain Rules · 12

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

Product, Quotient & Chain Rules · 13

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

Product, Quotient & Chain Rules · 14

$f(x) = (x - 2)^4$. Use the chain rule to find $f'(0)$.

Product, Quotient & Chain Rules · 15

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

Product, Quotient & Chain Rules · 16

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

Product, Quotient & Chain Rules · 10

ANSWER

54

Product, Quotient & Chain Rules · 9

ANSWER

-15

Product, Quotient & Chain Rules · 12

ANSWER

12

Product, Quotient & Chain Rules · 11

ANSWER

36

Product, Quotient & Chain Rules · 14

ANSWER

-32

Product, Quotient & Chain Rules · 13

ANSWER

7

Product, Quotient & Chain Rules · 16

ANSWER

64

Product, Quotient & Chain Rules · 15

ANSWER

512

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

$f(x) = \dfrac{3x^2 + 4x + 2}{x + 1}$. Use the quotient rule to find $f'(0)$.

$f(x) = (2x - 6)^5$. Use the chain rule to find $f'(1)$.

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

$f(x) = (3x + 1)^4$. Use the chain rule to find $f'(0)$.

$f(x) = (2x + 4)^4$. Use the chain rule to find $f'(0)$.

$f(x) = \sqrt{(x^2 - x - 5)}$. Use the chain rule to find $f'(3)$.

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

Product, Quotient & Chain Rules · 18

ANSWER

2

Product, Quotient & Chain Rules · 17

ANSWER

4

Product, Quotient & Chain Rules · 20

ANSWER

-1

Product, Quotient & Chain Rules · 19

ANSWER

2560

Product, Quotient & Chain Rules · 22

ANSWER

512

Product, Quotient & Chain Rules · 21

ANSWER

12

Product, Quotient & Chain Rules · 24

ANSWER

6

Product, Quotient & Chain Rules · 23

ANSWER

$$\frac{5}{2}$$