Product, Quotient & Chain Rules · 1

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

Product, Quotient & Chain Rules · 2

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

Product, Quotient & Chain Rules · 3

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

Product, Quotient & Chain Rules · 4

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

Product, Quotient & Chain Rules · 5

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

Product, Quotient & Chain Rules · 6

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

Product, Quotient & Chain Rules · 7

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

Product, Quotient & Chain Rules · 8

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

Product, Quotient & Chain Rules · 2

ANSWER

$$\frac{11}{64}$$

Product, Quotient & Chain Rules · 1

ANSWER

178

Product, Quotient & Chain Rules · 4

ANSWER

4

Product, Quotient & Chain Rules · 3

ANSWER

2560

Product, Quotient & Chain Rules · 6

ANSWER

-12

Product, Quotient & Chain Rules · 5

ANSWER

$$\frac{7}{8}$$

Product, Quotient & Chain Rules · 8

ANSWER

-10

Product, Quotient & Chain Rules · 7

ANSWER

$$\frac{7}{-4}$$

Product, Quotient & Chain Rules · 9

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

Product, Quotient & Chain Rules · 10

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

Product, Quotient & Chain Rules · 11

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

Product, Quotient & Chain Rules · 12

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

Product, Quotient & Chain Rules · 13

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

Product, Quotient & Chain Rules · 14

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

Product, Quotient & Chain Rules · 15

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

Product, Quotient & Chain Rules · 16

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

Product, Quotient & Chain Rules · 10

ANSWER

1

Product, Quotient & Chain Rules · 9

ANSWER

75

Product, Quotient & Chain Rules · 12

ANSWER

$$\frac{9}{-4}$$

Product, Quotient & Chain Rules · 11

ANSWER

-405

Product, Quotient & Chain Rules · 14

ANSWER

-3

Product, Quotient & Chain Rules · 13

ANSWER

-3

Product, Quotient & Chain Rules · 16

ANSWER

-6

Product, Quotient & Chain Rules · 15

ANSWER

$$\frac{7}{-2}$$

Product, Quotient & Chain Rules · 17

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

Product, Quotient & Chain Rules · 18

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

Product, Quotient & Chain Rules · 19

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

Product, Quotient & Chain Rules · 20

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

Product, Quotient & Chain Rules · 21

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

Product, Quotient & Chain Rules · 22

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

Product, Quotient & Chain Rules · 23

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

Product, Quotient & Chain Rules · 24

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

Product, Quotient & Chain Rules · 18

ANSWER

1

Product, Quotient & Chain Rules · 17

ANSWER

0

Product, Quotient & Chain Rules · 20

ANSWER

$$-\frac{3}{2}$$

Product, Quotient & Chain Rules · 19

ANSWER

-96

Product, Quotient & Chain Rules · 22

ANSWER

3

Product, Quotient & Chain Rules · 21

ANSWER

-1

Product, Quotient & Chain Rules · 24

ANSWER

0

Product, Quotient & Chain Rules · 23

ANSWER

-4