Name

Derivative Rules - Chain Rule Positive Powers to Derivative

1

Find the derivative f'(x) using the chain rule. $f(x) = (x-6)^2$

A $f'(x) = 2(x-6)$	B $f'(x) = (x-6)$
C $f'(x) = 2(x-6)^2$	

2

Find the derivative f'(x) using the chain rule.

$$f(x) = (3x-2)^3$$

A $f'(x) = 9(3x-2)^2$	B $f'(x) = 3(3x-2)^2$
C $f'(x) = 9(3x-2)^3$	

3

Find the derivative f'(x) using the chain rule.

$$f(x) = (-x+3)^3$$

A $f'(x) = 3(-x+3)^2$	B $f'(x) = -(-x+3)^2$
C $f'(x) = -3(-x+3)^3$	D $f'(x) = -3(-x+3)^2$

4

Find the derivative f'(x) using the chain rule.

$$f(x) = (-x^2+5)^4$$

A $f'(x) = 4(-x^2+5)^4(-2x)$	B $f'(x) = (-x^2+5)^3(-2x)$
C $f'(x) = 4(-x^2+5)^3$	D $f'(x) = 4(-x^2+5)^3(-2x)$

5

Find the derivative f'(x) using the chain rule.

$$f(x) = (-2x+6)^3$$

A $f'(x) = -6(-2x+6)^2$	B $f'(x) = -2(-2x+6)^2$
C $f'(x) = 3(-2x+6)^2$	D $f'(x) = -6(-2x+6)^3$

6

Find the derivative f'(x) using the chain rule.

$$f(x) = (-x-3)^3$$

A $f'(x) = -(-x-3)^2$	B $f'(x) = -3(-x-3)^2$
C $f'(x) = 3(-x-3)^2$	D $f'(x) = -3(-x-3)^3$

7

Find the derivative f'(x) using the chain rule.

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

A $f'(x) = 3(-x^2+4)^2$	B $f'(x) = 3(-x^2+4)^2(-2x)$
C $f'(x) = 3(-x^2+4)^3(-2x)$	D $f'(x) = (-x^2+4)^2(-2x)$

8

Find the derivative f'(x) using the chain rule.

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

A $f'(x) = 3(-2x^2-5)^3(-4x)$	B $f'(x) = (-2x^2-5)^2(-4x)$
C $f'(x) = 3(-2x^2-5)^2$	D $f'(x) = 3(-2x^2-5)^2(-4x)$