



Basic Derivatives - Negative Integer Power (with Rule) to Derivative

1 Find the derivative $f'(x)$ using the power rule.

if $f(x) = x^n$, $f'(x) = n x^{n-1}$
 $f(x) = x^{-5}$

A $f'(x) = -5x^{-6}$

B $f'(x) = -5x^{-5}$

C $f'(x) = x^{-6}$

D $f'(x) = -5x^{-4}$

2 Find the derivative $f'(x)$ using the power rule.

if $f(x) = x^n$, $f'(x) = n x^{n-1}$
 $f(x) = x^{-4}$

A $f'(x) = x^{-5}$

B $f'(x) = -4x^{-4}$

C $f'(x) = -4x^{-5}$

D $f'(x) = -4x^{-3}$

3 Find the derivative $f'(x)$ using the power rule.

if $f(x) = x^n$, $f'(x) = n x^{n-1}$
 $f(x) = x^{-1}$

A $f'(x) = -x^{-1}$

B $f'(x) = -x^{-2}$

C $f'(x) = x^{-2}$

D $f'(x) = -1$

4 Find the derivative $f'(x)$ using the power rule.

if $f(x) = x^n$, $f'(x) = n x^{n-1}$
 $f(x) = x^{-3}$

A $f'(x) = -3x^{-2}$

B $f'(x) = x^{-4}$

C $f'(x) = -3x^{-3}$

D $f'(x) = -3x^{-4}$

5 Find the derivative $f'(x)$ using the power rule.

if $f(x) = x^n$, $f'(x) = n x^{n-1}$
 $f(x) = x^{-2}$

A $f'(x) = -2x^{-1}$

B $f'(x) = -2x^{-3}$

C $f'(x) = -2x^{-2}$

D $f'(x) = x^{-3}$