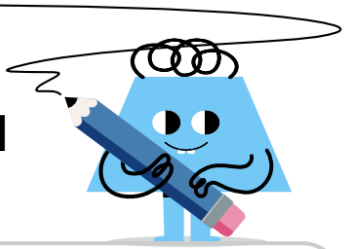
Name

Basic Derivatives - Negative Fractional Power to Derivative



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

$$f(x) = x^{-\frac{5}{2}}$$

A	$f'(x) = -\frac{5}{2}x^{-\frac{7}{2}}$	B	$f'(x) = -\frac{5}{2}x^{-\frac{5}{2}}$
C	$f'(x) = x^{-\frac{7}{2}}$	D	$f'(x) = -\frac{5}{2}x^{-\frac{3}{2}}$

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

$$f(x) = x^{-\frac{1}{3}}$$

A	$f'(x) = -\frac{1}{3}x^{\frac{2}{3}}$	B	$f'(x) = -\frac{1}{3}x^{-\frac{4}{3}}$
C	$f'(x) = -\frac{1}{3}x^{-\frac{1}{3}}$	D	$f'(x) = x^{-\frac{4}{3}}$

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

$$f(x) = x^{-\frac{2}{3}}$$

A	$f'(x) = -\frac{2}{3}x^{-\frac{5}{3}}$	B	$f'(x) = -\frac{2}{3}x^{\frac{1}{3}}$
C	$f'(x) = -\frac{2}{3}x^{-\frac{5}{3}}$	D	$f'(x) = x^{-\frac{5}{3}}$

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

$$f(x) = x^{-\frac{3}{2}}$$

A	$f'(x) = -\frac{3}{2}x^{-\frac{5}{2}}$	B	$f'(x) = -\frac{3}{2}x^{-\frac{1}{2}}$
C	$f'(x) = x^{-\frac{5}{2}}$	D	$f'(x) = -\frac{3}{2}x^{-\frac{5}{2}}$

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

$$f(x) = x^{-\frac{5}{3}}$$

A	$f'(x) = -\frac{5}{3}x^{-\frac{8}{3}}$	B	$f'(x) = -\frac{5}{3}x^{-\frac{2}{3}}$
C	$f'(x) = x^{-\frac{8}{3}}$	D	$f'(x) = -\frac{5}{3}x^{-\frac{5}{3}}$

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

$$f(x) = x^{-\frac{4}{3}}$$

A	$f'(x) = -\frac{4}{3}x^{-\frac{1}{3}}$	B	$f'(x) = x^{-\frac{7}{3}}$
C	$f'(x) = -\frac{4}{3}x^{-\frac{4}{3}}$	D	$f'(x) = -\frac{4}{3}x^{-\frac{7}{3}}$

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

$$f(x) = x^{-\frac{1}{2}}$$

A	$f'(x) = -\frac{1}{2}x^{-\frac{3}{2}}$	B	$f'(x) = x^{-\frac{3}{2}}$
C	$f'(x) = -\frac{1}{2}x^{-\frac{1}{2}}$	D	$f'(x) = -\frac{1}{2}x^{\frac{1}{2}}$