



Derivative Rules - General Exponential Exponent with Power to Derivative

<p>1</p> <p>Find the derivative $f'(x)$ using the general exponential rule and the chain rule.</p> <p>$f(x) = 2 \cdot 9^{x^{\frac{3}{2}}}$</p>	<p>2</p> <p>Find the derivative $f'(x)$ using the general exponential rule and the chain rule.</p> <p>$f(x) = 4^{x^{-1}}$</p>		
<p>A $f'(x) = 2 \cdot 9^{x^{\frac{3}{2}}} \cdot \frac{3}{2} x^{\frac{1}{2}}$</p>	<p>B $f'(x) = 2 \cdot 9^{x^{\frac{3}{2}}} \ln 9$</p>	<p>A $f'(x) = 4^{x^{-1}} \cdot (-x^{-2})$</p>	<p>B $f'(x) = 4^{x^{-1}} \ln 4$</p>
<p>C $f'(x) = 2 \cdot 9^{x^{\frac{3}{2}}} \ln 9 \cdot (x^{\frac{3}{2}})$</p>	<p>D $f'(x) = 2 \cdot 9^{x^{\frac{3}{2}}} \ln 9 \cdot \frac{3}{2} x^{\frac{1}{2}}$</p>	<p>C $f'(x) = 4^{x^{-1}} \ln 4 \cdot (-x^{-2})$</p>	<p>D $f'(x) = 4^{x^{-1}} \ln 4 \cdot (x^{-1})$</p>
<p>3</p> <p>Find the derivative $f'(x)$ using the general exponential rule and the chain rule.</p> <p>$f(x) = 4 \cdot 9^{x^{-1}}$</p>	<p>4</p> <p>Find the derivative $f'(x)$ using the general exponential rule and the chain rule.</p> <p>$f(x) = 2 \cdot 8^{x^{\frac{3}{2}}}$</p>		
<p>A $f'(x) = 4 \cdot 9^{x^{-1}} \ln 9$</p>	<p>B $f'(x) = 4 \cdot 9^{x^{-1}} \cdot (-x^{-2})$</p>	<p>A $f'(x) = 2 \cdot 8^{x^{\frac{3}{2}}} \ln 8$</p>	<p>B $f'(x) = 2 \cdot 8^{x^{\frac{3}{2}}} \ln 8 \cdot \frac{3}{2} x^{\frac{1}{2}}$</p>
<p>C $f'(x) = 4 \cdot 9^{x^{-1}} \ln 9 \cdot (-x^{-2})$</p>	<p>D $f'(x) = 4 \cdot 9^{x^{-1}} \ln 9 \cdot (x^{-1})$</p>	<p>C $f'(x) = 2 \cdot 8^{x^{\frac{3}{2}}} \cdot \frac{3}{2} x^{\frac{1}{2}}$</p>	<p>D $f'(x) = 2 \cdot 8^{x^{\frac{3}{2}}} \ln 8 \cdot (x^{\frac{3}{2}})$</p>
<p>5</p> <p>Find the derivative $f'(x)$ using the general exponential rule and the chain rule.</p> <p>$f(x) = 2 \cdot 8^{x^{\frac{1}{2}}}$</p>	<p>6</p> <p>Find the derivative $f'(x)$ using the general exponential rule and the chain rule.</p> <p>$f(x) = 4 \cdot 8^{x^{\frac{3}{2}}}$</p>		
<p>A $f'(x) = 2 \cdot 8^{x^{\frac{1}{2}}} \ln 8 \cdot \frac{1}{2} x^{-\frac{1}{2}}$</p>	<p>B $f'(x) = 2 \cdot 8^{x^{\frac{1}{2}}} \cdot \frac{1}{2} x^{-\frac{1}{2}}$</p>	<p>A $f'(x) = 4 \cdot 8^{x^{\frac{3}{2}}} \cdot \frac{3}{2} x^{\frac{1}{2}}$</p>	<p>B $f'(x) = 4 \cdot 8^{x^{\frac{3}{2}}} \ln 8$</p>
<p>C $f'(x) = 2 \cdot 8^{x^{\frac{1}{2}}} \ln 8$</p>	<p>D $f'(x) = 2 \cdot 8^{x^{\frac{1}{2}}} \ln 8 \cdot (x^{\frac{1}{2}})$</p>	<p>C $f'(x) = 4 \cdot 8^{x^{\frac{3}{2}}} \ln 8 \cdot (x^{\frac{3}{2}})$</p>	<p>D $f'(x) = 4 \cdot 8^{x^{\frac{3}{2}}} \ln 8 \cdot \frac{3}{2} x^{\frac{1}{2}}$</p>
<p>7</p> <p>Find the derivative $f'(x)$ using the general exponential rule and the chain rule.</p> <p>$f(x) = 4 \cdot 3^{x^{\frac{1}{2}}}$</p>	<p>8</p> <p>Find the derivative $f'(x)$ using the general exponential rule and the chain rule.</p> <p>$f(x) = 4 \cdot 6^{x^4}$</p>		
<p>A $f'(x) = 4 \cdot 3^{x^{\frac{1}{2}}} \ln 3 \cdot (x^{\frac{1}{2}})$</p>	<p>B $f'(x) = 4 \cdot 3^{x^{\frac{1}{2}}} \ln 3 \cdot \frac{1}{2} x^{-\frac{1}{2}}$</p>	<p>A $f'(x) = 4 \cdot 6^{x^4} \ln 6 \cdot 4x^3$</p>	<p>B $f'(x) = 4 \cdot 6^{x^4} \ln 6 \cdot (x^4)$</p>
<p>C $f'(x) = 4 \cdot 3^{x^{\frac{1}{2}}} \ln 3$</p>	<p>D $f'(x) = 4 \cdot 3^{x^{\frac{1}{2}}} \cdot \frac{1}{2} x^{-\frac{1}{2}}$</p>	<p>C $f'(x) = 4 \cdot 6^{x^4} \cdot 4x^3$</p>	<p>D $f'(x) = 4 \cdot 6^{x^4} \ln 6$</p>