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Derivatives in Science Application Of Derivatives Problems With Newton's Method is an application of derivatives will allow us to approximate solutions to an equation. There are many equations that cannot be solved directly and with this method we can get approximations to the solutions to many of those equations. Calculus I - Applications of Derivatives (Practice Problems) Derivatives describe the rate of change of quantities. This becomes very useful when solving various problems that are related to rates of change in applied, real-world, situations. Also learn how to apply derivatives to

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function. Answer :Applications of Derivatives
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 9. Suppose that $f(x)$ and $g(x)$ are differentiable functions and that $h(x) = f(x)g(x)$. You are given the following table of values:

$h(1)$	24
$g(1)$	6
$f(1)$	2
$h(1)$	20

 Using the table, find $g(1)$.
 10. Given $F(x) = f_2(g(x))$, $g(1) = 2$, $g'(1) = 3$, $f(2) = 4$, and $f'(2) = 5$, find $F'(1)$.
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Simplify your answer. 9. Suppose that $f(x)$ and $g(x)$ are differentiable functions and that $h(x) = f(x)g(x)$. You are given the following table of values:

x	1	2
$h(x)$	24	20
$f(x)$	6	2
$g(x)$	2	10

Using the table, find $h'(1)$ and $g'(1)$.

10. Given $F(x) = f^2(g(x))$, $g(1) = 2$, $g'(1) = 3$, $f(2) = 4$, and $f'(2) = 5$, find $F'(1)$.

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