Quotient rule

If $y = \frac{u}{v}$ is a quotient of two functions, then the *quotient rule* states that

$$\frac{dy}{dx} = \frac{v\frac{du}{dx} - u\frac{dv}{dx}}{v^2}.$$

This can be deduced by applying the product and chain rules to $y = uv^{-1}$.

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