

Product rule and quotient rule

After completing this section, students should be able to do the following.

- Identify products of functions.
- Use the product rule to calculate derivatives.
- Identify quotients of functions.
- Use the quotient rule to calculate derivatives.
- Combine derivative rules to take derivatives of more complicated functions.
- Explain the signs of the terms in the numerator of the quotient rule.
- Multiply tangent lines to justify the product rule.
- Use the product and quotient rule to calculate derivatives from a table of values.