

Chain rule

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

- Recognize a composition of functions.
- Take derivatives of compositions of functions using the chain rule.
- Take derivatives that require the use of multiple derivative rules.
- Use the chain rule to calculate derivatives from a table of values.
- Understand rate of change when quantities are dependent upon each other.
- Use order of operations in situations requiring multiple derivative rules.
- Justify the chain rule via the composition of linear approximations.
- Apply chain rule to relate quantities expressed with different units.
- Compute derivatives of trigonometric functions.