

# 1 Examples

**1.1** Here's where the text of an exercise would go - notice how the title of the subsection runs into the paragraph.

## Hint

The “hint” command is a convenience wrapper for a default tcolorbox with the title set to “Hint”

This “answer” environment is like the “proof” environment below, but without the preceding “Proof.” text or the QED box.

## Proof.

This is a “proof” environment; below is a list of command examples from homework.sty:

$$\backslash\mathrm{abs}\ \{x-c\} \longrightarrow |x - c|$$

$$\backslash\mathrm{absle}\ \{f(x)-f(c)\} \longrightarrow |f(x) - f(c)| < \varepsilon$$

$$\backslash\mathrm{absld}\ \{x-c\} \longrightarrow |x - c| < \delta$$

$$\backslash\mathrm{fabr} \longrightarrow f: [a, b] \rightarrow \mathbb{R}$$

$$\backslash\mathrm{func}\ [g]\{[c,d]\} \longrightarrow g: [c, d] \rightarrow \mathbb{R}$$

$$\backslash\mathrm{func}\ \{D\} \longrightarrow f: D \rightarrow \mathbb{R}$$

$$\backslash\mathrm{deltaxi} \longrightarrow \Delta x_i$$

$$\backslash\mathrm{deltaxi}\ [k] \longrightarrow \Delta x_i[k]$$

$$\backslash\mathrm{lowersum} \longrightarrow L(f, P) = \sum_{i=1}^n m_i \Delta x_i$$

$$\backslash\mathrm{uppersum} \longrightarrow U(f, P) = \sum_{i=1}^n M_i \Delta x_i$$

$$\backslash\mathrm{partition} \longrightarrow P = \{x_0, x_1, \dots, x_n\}$$

$$\backslash\mathrm{intab}\ f(x)dx \longrightarrow \int_a^b f(x)dx$$

□