WPG

Practical LaTeX Tutorial # 23

Objectives

- Aligned Formulas
- Cases Environment
- Example

Cases Environment

$$|x| = \begin{cases} x, & \text{x} \geq 0 \\ -x, & \text{x} < 0 \end{cases}$$

$$f(x) = \begin{cases} 0, & \text{x} \leq -1 \\ \sqrt{1-x^2}, & -1 < \text{x} < 1 \\ x, & \text{x} \geq 1 \end{cases}$$

$$|x| = \begin{cases} x, & \text{x} \geq 0 \\ -x, & \text{x} < 0 \end{cases}$$

$$f(x) = \begin{cases} 0, & \text{x} \leq -1 \\ \sqrt{1-x^2}, & -1 < \text{x} < 1 \\ x, & \text{x} \geq 1 \end{cases}$$

$$\lim_{x \to 2-} f(x) = 6, \text{where} f(x) = \begin{cases} x, & x > 2 \\ 3x, & x \leq 2 \end{cases}$$

$$V_{ijk} = \begin{cases} \frac{y_u + y_t}{2} - \frac{x_u + x_t}{2}, & \text{if } x_u < y_t \\ \frac{1}{C}\left[\frac{x_u^3 - y_u^3}{6} + \frac{y_t^2 + x_u^2}{2} x_l + (x_u - y_t)\frac{x_l^2}{2} \right. & \\ \quad \left. + \frac{y_u^2 - x_u^2}{x}(x_u - x_l) - (y_u - x_u)\frac{x_u^2 - x_t^2}{2}\right], & \text{if } x_u \in [y_t, y_u] \\ \frac{1}{x_u - x_l}\left[\frac{(y_u + y_t)^2}{6} - \frac{y_u + y_t}{2} x_l + \frac{x_l^2}{2}\right], & \text{otherwise} \end{cases}$$