# 1 Special Symbols

The distributive property states that $a(b+c) = ab + ac$, for all $a, b, c \in \mathbb{R}$. The equivalence class of $a$ is $[a]$. The set $A$ is defined to be $1, 2, 3$. The movie ticket costs \$10 USD.

# 2 Parentheses

$$2(\frac{1}{x^2-1})$$

$$2\left(\frac{1}{x^2-1}\right)$$

$$2\Uparrow\frac{1}{x^2-1}\Uparrow$$

$$\frac{dy}{dx}|_{x=1}$$

$$\frac{dy}{dx}\Big|_{x=1}$$

$$\left(\frac{1}{1+\left(\frac{1}{1+x}\right)}\right)$$

# 3 Tables

| $x$ | 2 | 4 | 6 | 8 | 10 |
|---|---|---|---|---|---|
| $f(x)$ | 10 | 11 | 12 | 13 | 14 |

| $x$ | 2 | 4 | 6 | 8 | 10 |
|---|---|---|---|---|---|
| $f(x)$ | $\frac{1}{2}$ | 11 | 12 | 13 | 14 |

Table 1: Something.

| $f(x)$ | $f'(x)$ |
|---|---|
| $x > 0$ | The function $f(x)$ is increasing. |

Table 2: Something else.

| $f(x)$ | $f'(x)$ |
|---|---|
| $x > 0$ | The function $f(x)$ is increasing and we have a lot of text here. Damn it! It does not fit in the page! |

Table 3: Something else.

# 4 Equation Arrays

$$5x^2 - 9 = x + 3 \tag{1}$$
$$5x^2 - x - 12 = 0 \tag{2}$$

$$\begin{aligned} 5x^2 - 9 &= x + 3 \\ 5x^2 - x - 12 &= 0 \\ &= 12 + x - 5^x 2 \end{aligned}$$

$$5x^2 - 9 = x + 3 \tag{3}$$
$$5x^2 - x - 12 = 0 \tag{4}$$
$$= 12 + x - 5^x 2 \tag{5}$$