1　gather 和 gather* 环境

$$a + b = b + a \tag{1}$$
$$abba \tag{2}$$

$$a + b = b + a$$
$$abba$$

$$a + b = b + a$$
$$abba$$

2　align 和 align* 环境

$$x = t + \cos t + 1 \tag{3}$$
$$y = 2\sin t \tag{4}$$

$$x = t + \cos t + 1$$
$$y = 2\sin t$$

3　split 环境

$$\begin{aligned}\cos 2x &= \cos^2 x - \sin^2 x \\ &= 2\cos^2 x - 1\end{aligned} \tag{5}$$

4   cases 环境

$$D(x) = \begin{cases} 1, & \text{如果} x \in \mathbb{Q}; \\ 0, & \text{如果} x \in \mathbb{R} \setminus \mathbb{Q}. \end{cases} \tag{6}$$