

Without grid:

(flushl)

$$\begin{aligned} \forall \varepsilon > 0, \exists \delta > 0, \quad & |P(x) - P(\delta)| < \varepsilon \\ \implies d(P(x), P(\delta)) < \varepsilon \\ & \vdots \end{aligned}$$

(flushr)

intertext, keeping alignment position

$$\begin{aligned} & \vdots \\ \therefore \lim_{t \rightarrow 0} f(t) &= f(x) && \text{(referencable tag)} \\ & \vdots \\ \text{centertext also keeps alignment} \\ & \vdots \\ \therefore \lim_{h \rightarrow 0} f(0 + h) &= f(x) \end{aligned}$$

I can refer to Equation (referencable tag).

Also works inside grids or tables:

Inside grid, Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua quaerat.	
left aligned	$\begin{aligned} x(2x - 1) &= 0 && \text{(factorize } x) \\ \therefore x &= 0, \frac{1}{2} && \blacksquare \end{aligned}$
intertext,	
	$Q_t(a) = \frac{\sum_{i=1}^{t-1} \mathbb{1}_{A_i=a} X_i}{\sum_{i=1}^{t-1} \mathbb{1}_{A_i=a}} = \hat{\mu}_a(t-1) \tag{abc}$
for $\mathcal{E}_{\text{SG}}^2$ :	$\frac{1}{2} \mathbb{P}( X  - \mathbb{E}[X] \geq \varepsilon) \leq \exp\left(-\frac{\varepsilon^2}{2\sigma^2}\right) \tag{sgc}$

$A_t = \arg \max_{a \in \mathcal{A}} Q_t(a)$ <p>A very long multiline intertext that is auto spaced. Lorem ipsum dolor sit amet, consectetur adipiscing elit.:</p> $A_t = 2 \quad \text{(2nd arm in } \mathcal{A})$ <p>I can right flush text that takes up vertical space too</p> $\therefore t = 5$ <p>From Equation (sgc), we know that...</p>
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As per Equation (abc) above,

For all  $a \in \mathcal{A}$ ,

$$Q_t(a) \longrightarrow \mu_a$$
(abc)

Now, Equation (abc) refers to the equation right above this paragraph, instead of the first one.

$$Q_t(a) \longrightarrow 0$$
(abc)

Now I can refer to both the new Equation (abc) and the old Equation (abc). I can also link to my equation using a **custom reference text**