

02 Math

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January 9, 2023

Inline latex: $x \in_R \mathbb{Z}_{2^\ell}$, use $\$$ to wrap.

$$(y_1, \dots, y_n) \leftarrow \mathcal{F}(x_1, \dots, x_n)$$

Test reference: Equation 1.

$$\langle c \rangle^A = \langle a \rangle^A \times \langle b \rangle^A \tag{1}$$

$$= (\langle a \rangle_0^A + \langle a \rangle_1^A) \times (\langle b \rangle_0^A + \langle b \rangle_1^A) \tag{2}$$

$$\begin{aligned} &= \langle a \rangle_0^A \times \langle b \rangle_0^A + \langle a \rangle_1^A \times \langle b \rangle_1^A \\ &\quad + \underbrace{\langle a \rangle_0^A \times \langle b \rangle_1^A}_{\langle u \rangle^A} + \underbrace{\langle a \rangle_1^A \times \langle b \rangle_0^A}_{\langle v \rangle^A} \end{aligned} \tag{3}$$

$$\begin{aligned} &= \langle a \rangle_0^A \times \langle b \rangle_0^A + \langle u \rangle_0^A + \langle v \rangle_0^A \\ &\quad + \langle a \rangle_1^A \times \langle b \rangle_1^A + \langle u \rangle_1^A + \langle v \rangle_1^A \end{aligned} \tag{4}$$

$$= \langle c \rangle_0^A + \langle c \rangle_1^A \tag{5}$$