

Division: Encoding using base ops

$$\begin{array}{c|cc} R & A & B \\ \hline & a_1 & b_1 \\ & a_2 & b_2 \\ & a_3 & b_1 \\ & a_3 & b_2 \end{array}$$

$$\begin{array}{c|c} S & B \\ \hline & b_1 \\ & b_2 \end{array}$$

①

$$\begin{array}{c|c} T_1 := \pi_A R & A \\ \hline & a_1 \\ & a_2 \\ & a_3 \end{array}$$

all A's

②

$$\begin{array}{c|cc} T_2 := (T_1 \times S) - R & A & B \\ \hline & a_1 & b_2 \\ & a_2 & b_1 \end{array}$$

③

$$\begin{array}{c|c} T_3 := \pi_A T_2 & A \\ \hline & a_1 \\ & a_2 \end{array}$$

④

$$\begin{array}{c|c} R \div S := T_3 - B \\ \hline & a_3 \end{array}$$

⑤

$$R \div S := \pi_A R - \pi_A [(T_1 R) \times S] - R$$