IDB Lecture 5: Relational Algebra on Sets

Division

For, R over a set of attributes X, S over a set of attributes $Y \subset X$. Let $Z = X - Y$

$$\begin{aligned} R \div S &= \{r \in \pi_Z(R) \mid \forall s \in S, rs \in R\} \\ &= \{r \in \pi_Z(R) \mid \{r\} \times S \subseteq R\} \\ &= \pi_Z(R) - \pi_Z(\pi_Z(R) \times S - R) \end{aligned}$$

Note: I don't really understand
Intuition: remove all data from X relating to Y?