$\sigma_{R.b \neq S.b}(R \times S) - (R \times S)$

**Answer:** $\phi$ (Empty).

$R - \pi_{R.a,R.b}(\sigma_{R.b=S.b}(R \times S))$

**Answer:** It finds tuples of $R$ that have no matching tuples in $S$ (i.e. it computes R ANTIJOIN S).

$\pi_a(R) - \pi_{R.a}(\sigma_{(R_1.a > R.a) \wedge (R_2.a > R_1.a)}(R \times \rho_{R_1}(R) \times \rho_{R_2}(R)))$

**Answer:** It finds the top 2 values of $a$ present in $R$.

"Find the makers who don't make any desktop, and do make some laptop(s)"

$(\text{Computer} - \sigma_{\text{category="desktop"}}(\text{Computer}))) \cap \pi_{\text{maker}}(\sigma_{\text{category="laptop"}}(\text{Computer})$

Find the phone numbers of *all* the makers who make desktops with speed = 3.2"

$\pi_{\text{maker}}\, \sigma_{\text{model}=\text{num}}\ (\sigma_{\text{category} = \text{"desktop"}}\ (\text{Computer}) \times \sigma_{\text{speed} = 3.2}\ (\text{Model}))$