(1) $\pi_{SNO}(\sigma_{JNO =`J1'}(SPJ))$

(2)

$$\pi_{SNO}(\sigma_{JNO=‘J1’\wedge PNO=‘P1’}(SPJ))$$

(3)

$$\pi_{SNO}(\pi_{SNO,PNO}(\sigma_{JNO='J1'}(SPJ)) \bowtie \pi_{PNO}(\sigma_{COLOR='红'}(P)))$$

(4)

$$\pi_{JNO}(J) - \pi_{JNO}(\pi_{SNO}(\sigma_{CITY=‘天津’}(S)) \bowtie \pi_{JNO,SNO,PNO}(SPJ) \bowtie \pi_{PNO}(\sigma_{COLOR=‘红’}(P)))$$

(5)

$$\pi_{JNO,PNO}(SPJ) \div \pi_{PNO}(\sigma_{SNO='S1'}(SPJ))$$