

1)

AGI <---- $\sigma_{PName = "AGI"}$ (PROJECT)

22_Hours <---- $\sigma_{Hours > 22}$ (WORKS_ON)

Employees_Working_AGI <---- 22_Hours $\bowtie_{PNO = PNUMBER}$ AGI

Dept3 <---- $\sigma_{DNO = 3}$ (EMPLOYEE)

DEPT_Project <---- Dept3 $\bowtie_{SSN = ESSN}$ Employees_Working_AGI

RESULT <---- $\pi_{Fname, Lname}$ (DEPT_Project)

2)

Marketing <---- $\sigma_{DNAME = "Marketing"}$ (DEPARTMENT)

Employees_In_Marketing <---- Employee $\bowtie_{DNO = DNUMBER}$ Marketing

FemaleDependent <---- $\sigma_{SEX = "Female"}$ (Dependent)

RESULT <---- $\pi_{Dependent_Name}$ (FemaleDependent $\bowtie_{ESSN = SSN}$ Employees_In_Marketing)

3)

Annie_Smith <---- $\sigma_{FName = "Annie" \text{ and } LName = "Smith"}$ (Employee)

RESULT <---- $\pi_{Fname, Lname}$ (Employee $\bowtie_{SUPERSSN = SSN}$ Annie_Smith)

4)

Hours <---- $\sigma_{Hours = 0}$ (Works_On)

Employees_Working_0 <---- Employees $\bowtie_{SSN = ESSN}$ Hours

RESULT <---- $\pi_{Fname, Lname}$ (Employees_Working_0)

