

Pizza\_ra

1)  $\sigma_{age < 18}(\text{Person})$

2)  $\pi_{\text{pizzeria}, \text{pizza}, \text{price}}(\sigma_{\text{name} = \text{'Amy'} \wedge \text{price} < 10}(\text{Eats At Server}))$

3)  $\pi_{\text{pizzeria}, \text{name}, \text{age}}(\sigma_{age < 18}(\text{Person At Frequent}))$

4)  $\pi_{\text{pizzeria}}(\sigma_{age < 18}(\text{Person At Frequent})) \cap \pi_{\text{pizzeria}}(\sigma_{age > 30}(\text{Person At Frequent}))$

5)  $\text{Under-18} = \pi_{\text{pizzeria}, \text{name as person1}, \text{age as age1}}(\sigma_{age < 18}(\text{Person At Frequent}))$   
 $\text{Over-30} = \pi_{\text{pizzeria}, \text{name as person2}, \text{age as age2}}(\sigma_{age > 30}(\text{Person At Frequent}))$

ANS:  $(\text{Under-18}) \cup (\text{Over-30})$

6)  $\sigma_{\text{num-pizza} \geq 2}(\gamma_{\text{count}(\text{pizza}) \rightarrow \text{num-pizza}}^{\text{name}}(\text{Eats}))$

7)  $\gamma_{\text{Avg}(\text{price}) \rightarrow \text{avg-price}}^{\text{pizza}}(\text{Server})$