Consider the following schema:
Customers (cid, cname, city)
Products (pid, pname, city, quantity, price)
Agents (aid, aname, city)
Orders (ordno, cid, aid, pid, month, quantity, total)

Answer the following queries using Tuple Relational Calculus (TRC) AND Relational Algebra (RA):

1. Find all orders with quantity equal to 1000 or more.
   TRC: \( \{ O \mid \sigma \text{quantity} \geq 1000 \} \)
   RA: \( \sigma \text{quantity} \geq 1000 \) Orders

2. Find all (ordno, cid) pairs for order with a total value less than $5000.
   TRC: \( \{ O \mid \exists \sigma \text{total} \lt 5000 \} \)
   RA: \( \pi \sigma \text{total} \lt 5000 \) Orders

3. Find all (ordno, cname) pairs for orders in March.
   TRC: \( \{ R \mid \exists \sigma \text{month} = \text{March} \} \)
   RA: \( \pi \sigma \text{month} = \text{March} \) Orders

4. Find all product names of products in Berkeley ordered in March.
   TRC: \( \{ P \mid \exists \sigma \text{city} = \text{Berkeley} \} \)
   RA: \( \pi \sigma \text{city} = \text{Berkeley} \) Products

5. Find all (cid, aid, pid) triples for customer, agent, product combinations that are all in the same city.
   TRC: \( \{ R \mid \exists \sigma \text{city} = \text{A.city} \land \exists \sigma \text{city} = \text{B.city} \} \)
   RA: \( \pi \sigma \text{city} = \text{A.city} \land \sigma \text{city} = \text{B.city} \) Orders

6. Find pids of products ordered through agent 3 but not through agent 6.
   TRC: \( \{ O \mid \neg \exists \sigma \text{aid} = 6 \} \)
   OR Another Valid TRC: \( \{ O \mid \neg \exists \sigma \text{aid} = 6 \} \)
   RA: \( \pi \sigma \text{aid} = 3 \) Orders

7. Get names of agents who place orders for all products ordered by customer 2
   TRC: \( \{ A \mid \exists \sigma \text{aname} = \text{A.aname} \land \forall \sigma \text{pid} = 2 \} \)
   RA: \( \pi \sigma \text{pid} = 2 \) Orders