**Truth Tables** 

Complete the following truth table.

| Р | Q | R | $P \wedge R$ | ~ Q | QvR | P ∧ ~ Q |
|---|---|---|--------------|-----|-----|---------|
| Т | Т | T |              |     |     |         |
| Т | T | F |              |     |     |         |
| Т | F | Т |              |     |     |         |
| Т | F | F |              |     |     |         |
| F | T | Т |              |     |     |         |
| F | Т | F |              |     |     |         |
| F | F | Т |              |     |     |         |
| F | F | F |              |     |     |         |

Do the following compound propositions form a consistent system? P  $\land$  R, ~ Q, Q v R, P  $\land$  ~ Q

Answer:

Complete the following truth table.

| Р | Q | R | $P \vee R$ | ~ Q | $P \wedge Q$ | ~ Q \/ R |
|---|---|---|------------|-----|--------------|----------|
|   |   |   |            |     |              |          |
|   |   |   |            |     |              |          |
|   |   |   |            |     |              |          |
|   |   |   |            |     |              |          |
|   |   |   |            |     |              |          |
|   |   |   |            |     |              |          |
|   |   |   |            |     |              |          |
|   |   |   |            |     |              |          |

Do the following compound propositions form a consistent system? P V R, ~ Q, P  $\land$  Q, ~ Q v R

Answer: