Square of Opposition

<table>
<thead>
<tr>
<th>Name</th>
<th>Statement</th>
<th>Quantity</th>
<th>Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>All S are P.</td>
<td>Universal</td>
<td>Affirmative</td>
</tr>
<tr>
<td>E</td>
<td>No S are P.</td>
<td>Universal</td>
<td>Negative</td>
</tr>
<tr>
<td>I</td>
<td>Some S are P.</td>
<td>Universal</td>
<td>Affirmative</td>
</tr>
<tr>
<td>O</td>
<td>Some S are not P.</td>
<td>Particular</td>
<td>Negative</td>
</tr>
</tbody>
</table>

1. **Contradiction**: The A & O and E and I statements are contradictory. Cannot both be true or both false at the same time. If one is true, the other must be false. If one is false, the other must be true.

   - **A&O**
   - All men are thrill-seekers
   - Some men are not thrill seekers

   - **E&I**
   - No men are thrill seekers
   - Some are thrill seekers

2. **Contrariety**: The A and E statement are contrary. Cannot both be true at the same time BUT can both be false. If one proposition is true, the other must be false; however, if one is false, it does not necessitate the truth or falsity of the other one.

   - **All men are thrill-seekers**
   - No men are thrill seekers

3. **Sub-Contrariety**: The I and O statement are sub-contrary. Cannot both be false at the same time BUT can both be true. If one sub-contrary proposition is true, it does not necessitate the truth or falsity of the other. If one is false, the other must be true.

   - **Some men are thrill-seekers**
   - Some men are not thrill seekers

4. **Sub-Implication**: The A relates to I and the E relates to O. The truth of the universal implies the truth of the particular. When a universal if false, the truth-value of the particular is unknown.

   - **A to I**
   - All men are thrill-seekers
   - Some men are thrill seekers

   - **E to O**
   - No men are thrill-seekers
   - Some men are not thrill seekers

5. **Super-Implication**: The relationship exists between the particular and universal propositions. I relates to A and O relates to E. The truth of the particular does not necessitate the truth or falsity of the universal proposition. The falsity of the particular proposition implies the falsity of the universal proposition.

   - **I to A**
   - Some men are thrill-seekers
   - All men are thrill-seekers

   - **O to E**
   - Some men are not thrill-seekers
   - No men are thrill-seekers

---

*Printed with permission from Classical Academic Press - Discovery of Deduction text. Designed by Carrie-Ann Barrow*