

Introduction to Logic

Exercises: Square of Opposition

1 Contrary

Directions: State the **contrary** of each of the following statements. *First*, state the resultant truth value if the given statement is assumed true; *second*, state the resultant truth value if the given statement is assumed false.

1. **All voters are citizens.**
2. **No kinetic arts are mass cults.**

2 Subcontrary

Directions: State the **subcontrary** of the following statements. *First*, state the resultant truth value if the given statement is assumed true; *second*, state the resultant truth value if the given statement is assumed false.

1. **Some microbes are marine organisms.**
2. **Some shales are not compressed sandstone.**

3 Subalternation

Directions: Use **subalternation** for the following statements. *First*, state the resultant truth value if the given statement is assumed true; *second*, state the resultant truth value if the given statement is assumed false.

1. **All Zurich gnomes are bankers.**
2. **No ribosomes are genes.**
3. **Some foreign pipelines are safe investments.**
4. **Some Presidents are not smilers.**

4 Contradiction

Directions: Use **contradiction** for the following statements. *First*, state the resultant truth value if the given statement is assumed true; *second*, state the resultant truth value if the given statement is assumed false.

1. **All scientists are curious persons.**
2. **No artists are analysts.**
3. **Some historians are narrators.**
4. **Some citizens are not state employees.**

Check to see if resultant
truth values are given.

Name