

Introductory Logic

Homework #3

Read pages 1-12 of *Introductory Logic*.



Define the following, summarizing from the text:

- Logic –

- Statement –

- Inductive logic –

- Deductive logic –

- Law of Excluded Middle –

- Law of Identity –

- Law of Noncontradiction –

Complete Exercise One (page 7).

- | | |
|-------------------------|-----------|
| 1. _____ | 7. _____ |
| 2. _____ | 8. _____ |
| 3. _____ | 9. _____ |
| 4. _____ | 10. _____ |
| 5. _____ | 11. _____ |
| 6. _____ | 12. _____ |
| 13. Brain teaser: _____ | |



Define the following, summarizing from the text:

- Self-supporting statements

- Supported statements

- Self-reports

- Tautology
- Self-contradiction
- True/false by definition

Name the three types of self-supporting statements. Include sub-categories in parentheses:

✎

✎

✎

Exercise Two (page10):

1. a. _____

b. _____

c. _____

d. _____

e. _____

2. a. _____

b. _____

c. _____

d. _____

e. _____

3. a. _____

b. _____

c. _____

d. _____

e. _____

Exercise Three (page 12):

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____

9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____

Cranium Calisthenics

Scheherazade relayed this ancient puzzle to the king: "Another old puzzle tells of a man who said: 'If I were to give seven coins to each beggar at my door, I would have twenty-two coins left. I lack thirty-two coins of being able to give them nine coins apiece.' How many beggars were there and how many coins did the man have?"¹ (You must explain your answer to receive credit!)



¹ Smullyan, Raymond, *The Riddle of Scheherazade and Other Amazing Puzzles*. Random House, 1997.
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