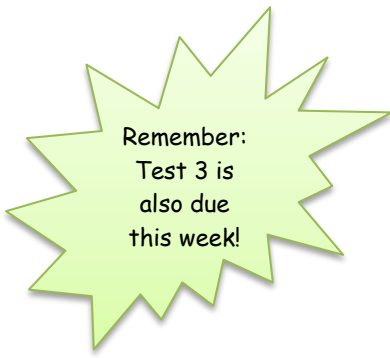


Name _____

Points (20) _____



Introductory Logic

Homework #10
(Due 11/13/2012)

Read pages 65-70 in the text. Define the following, *using the text*:



- Distributed term –

Underline the distributed terms in the following syllogisms. Try to do it without referring to your book if you can.

- | | |
|---|--|
| 1. No university student is a toddler.
Some skaters are university students.
∴ Some skaters are not toddlers. | 3. Some rhinos are mammals.
All mammals are animals.
∴ Some animals are mammals. |
| 2. All swans are white birds.
Some birds are swans.
∴ Some birds are white birds. | 4. Some boys are not soccer players.
Some soccer players are athletes.
∴ Some athletes are not boys. |

Identify the mistake(s) in each syllogism below. Don't worry about validity. Consider all of the rules you have learned so far pertaining to writing syllogisms in standard, categorical form.

- | | |
|---|-------|
| 5. Some men are tall.
All giraffes are tall.
∴ Some giraffes are men. | _____ |
| 6. No granite is sandstone.
Some rocks are granite.
∴ Some sandstone is not rock. | _____ |
| 7. Some monkeys are not on the ground.
Some monkeys are climbing trees.
∴ Some trees are not on the ground. | _____ |
| 8. No cats are dogs.
All dogs are canines.
∴ Some felines are not cats. | _____ |

For practice, name the fallacy (or fallacies) which occur in the following syllogisms. Label the mood and figure of each syllogism. Check your answers below.

<p>1. Some carrots are orange carrots. All carrots are vegetables. ∴ Some vegetables are not orange carrots.</p> <p>Fallacy(s): _____ _____</p> <p>Mood/Figure: _____</p>	<p>3. All cats are felines. Some felines are kittens. ∴ All kittens are cats.</p> <p>Fallacy(s): _____ _____</p> <p>Mood/Figure: _____</p>
<p>2. No pets are wild animals. Some dogs are not pets. ∴ Some dogs are not wild animals.</p> <p>Fallacy(s): _____ _____</p> <p>Mood/Figure: _____</p>	<p>4. Some students are not logic students. All ninth-graders are students. ∴ Some ninth-graders are logic students.</p> <p>Fallacy(s): _____ _____</p> <p>Mood/Figure: _____</p>

- | |
|--|
| <p>1. IAO-3; Fallacy of Illicit Major and Fallacy of Two Affirm. Prem. & Neg. Concl.
2. EOO-1; Fallacy of Two Neg. Prem.
3. AIA-4; Fallacy of Undist. Middle and Fallacy of Illicit Minor
4. OAI-1; Fallacy of a Neg. Prem. & Affirm. Concl. and Fallacy of Undist. Middle</p> |
|--|

If you had any trouble with the practice, reread the assigned text pages. Otherwise, go on.



Read pages 66-71 in the text. You may (optional) make study notes here to remember the meaning of the following fallacies.

- 1 - Fallacy of Undistributed Middle
- 2 - Fallacy of an Illicit Major/Minor
- 3 - Fallacy of Two Negatives
- 4 - Fallacy of Negative Premise and Affirmative Conclusion
- 5 - Fallacy of Two Affirmative Premises and a Negative Conclusion

Exercise Eighteen (pages 70-71) Before you identify the fallacies, write the schema of the syllogism. It is imperative that you put them in standard order first! To save time/space, you may use the fallacy numbers shown above in the vocabulary section. For Fallacy #2, specify which term is illicit, for example: “2 (major).”

<p>1. _____ _____ _____</p>	<p>2. _____ _____ _____</p>
<p>Fallacy(s): _____</p>	<p>Fallacy(s): _____</p>

- 1 - Fallacy of Undistributed Middle
- 2 - Fallacy of an Illicit Major/Minor
- 3 - Fallacy of Two Negatives

- 4 - Fallacy of Negative Premise and Affirmative Conclusion
- 5 - Fallacy of Two Affirmative Premises and a Negative Conclusion

3. _____

Fallacy(s): _____

4. _____

Fallacy(s): _____

5. _____

Fallacy(s): _____

6. _____

Fallacy(s): _____

7. _____

Fallacy(s): _____

8. _____

Fallacy(s): _____

9. _____

Fallacy(s): _____

10. _____

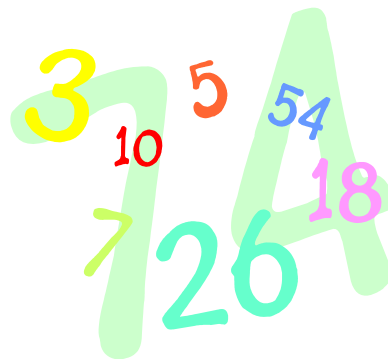
Fallacy(s): _____

*You are not required to do the challenge given on page 71, but it would be very helpful if you need some extra practice!

Cranium Calisthenics

What is the number?¹ ___ ___ ___

1. It is a three-digit whole number.
2. It is an odd number.
3. It is a multiple of 7.
4. It is divisible by 9.
5. Each of its digits is different.
6. It is greater than 700.
7. It is a multiple of 27.
8. Its hundreds digit is not 8.



Don't forget – there are some number puzzle tips on the Cranium Calisthenics Hints page of the class website.

¹ Sherard III, Wade H. *Logic Number Problems*, Dale Seymour Publications, 1973.
 Shelli Wanjig - \school\logic\homework\Logic_HW_10