

Unit 2 - Week 0

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Assignment 0

The due date for submitting this assignment has passed. **Due on 2020-01-27, 23:59 IST.**
 As per our records you have not submitted this assignment.

Assignment 0 is only for practice, it will not be considered for evaluation.

1) All cities are congested. Chennai is a city. Given these two facts, can you conclude anything about the congestion in Chennai? 1 point

Yes
 No

No, the answer is incorrect.
 Score: 0
 Accepted Answers:
 Yes

2) Consider the argument: "If it rains, the grass will be wet" and given the fact "The grass is wet", what can you infer? (What is your take on inferring an antecedent from the consequent?) 1 point

It rained
 It did not rain
 Cannot infer

No, the answer is incorrect.
 Score: 0
 Accepted Answers:
 Cannot infer

3) Given the facts:
 1. One of Tinker, Tailor, Soldier, or Spy is the culprit
 2. The culprit stole the document.
 3. Tinker and Soldier did not steal the document.
 4. If Tailor or Spy is the culprit, then the document must be in Paris.

Can it be shown that "The document is in Paris" is true?

Yes
 No

No, the answer is incorrect.
 Score: 0
 Accepted Answers:
 Yes

4) The figure shows a world (a domain of interest) that contains 10 objects, nothing more nothing less. 1 point

In this world/domain, which of the following statements are true?

There is at least one blue object
 There is at least one non-blue object
 There is at least one non-yellow object
 There is at least one yellow object

No, the answer is incorrect.
 Score: 0
 Accepted Answers:
 There is at least one blue object
 There is at least one non-blue object
 There is at least one non-yellow object

5) Which of the following statements are true in the domain shown in question 4? 1 point

All objects are non-blue
 All objects are blue
 All objects are yellow
 All objects are non-yellow

No, the answer is incorrect.
 Score: 0
 Accepted Answers:
 All objects are non-yellow

6) Which of the following statements are true in the domain shown in question 4? 1 point

There is at least one green spherical object
 There is at least one green non-spherical object
 There is at least one blue spherical object
 There is at least one blue non-spherical object
 There is at least one yellow non-spherical object
 There is at least one yellow spherical object

No, the answer is incorrect.
 Score: 0
 Accepted Answers:
 There is at least one green spherical object
 There is at least one green non-spherical object
 There is at least one blue spherical object

7) Which of the following statements are true in the domain shown in question 4? (Now, how will you argue about the last two statements e and f? Discuss it in the forum.) 1 point

All green objects are non-spherical
 All green objects are spherical
 All blue objects are non-spherical
 All blue objects are spherical
 All yellow objects are spherical
 All yellow objects are non-spherical

No, the answer is incorrect.
 Score: 0
 Accepted Answers:
 All blue objects are spherical
 All yellow objects are spherical
 All yellow objects are non-spherical

8) Which of the following statements are true in the domain shown in question 4? 1 point

Some green objects are spherical
 Some green objects are non-spherical
 Some blue objects are spherical
 Some blue objects are non-spherical
 Some yellow objects are non-spherical
 Some yellow objects are spherical

No, the answer is incorrect.
 Score: 0
 Accepted Answers:
 Some green objects are spherical
 Some green objects are non-spherical
 Some blue objects are spherical

9) Suppose we have three colored blocks stacked on a table, where the top one is green, the bottom one is not green, and the color of the middle block is not known 1 point

Is there a green block directly on top of a non-green one?

Yes
 No
 Cannot say

No, the answer is incorrect.
 Score: 0
 Accepted Answers:
 Yes

10) "A barber is the one who shaves all those, and only those, who do not shave themselves". Does the barber shave himself? 1 point

Yes
 No
 Such a barber cannot exist

No, the answer is incorrect.
 Score: 0
 Accepted Answers:
 Such a barber cannot exist

11) Given the set of facts: { birds fly, penguins are birds, penguins don't fly, Tweety is a bird }, assuming you got the question 1 right, you will be tempted to infer "Tweety flies". 1 point

Now, what inferences can be made if we add "Tweety is a penguin" to the set of facts?

(Can you think of reasoning mechanisms that can handle such cases where the addition of new knowledge tend to invalidate the conclusions derived earlier.)

Tweety flies
 Tweety does not fly
 Cannot infer anything

No, the answer is incorrect.
 Score: 0
 Accepted Answers:
 Tweety does not fly