PHI 2010 – Team-based Assignment: Problem of Induction Name: _____

Instructions: Write name legibly. Explain so that smart people who have not taken our class will understand.

In your own words and with an example, explain inductive inference. (See Popper or your Logic notes)

In your own words and with an example, explain the problem of induction. (Popper, p. 4)

For Popper means "a principle of induction" is a statement that… (p. 4-5)

(a) *transforms* inductive arguments and inferences into logical form.
(b) *justifies* inductive arguments and inferences (with the principles of logic).
(c) *explains* how science can determine whether theories are true or false.
(d) (a) and (b)
(e) All of the above.

Indicate whether the following statements are true or false by underlining one or the other option.

True False *Popper thinks that a principle of induction is necessary for science.*
True False *Popper thinks that a principle of induction can be logically valid.*
True False *Popper thinks that the problem of induction is insurmountable.*

Explain why solving the problem of induction leads to "an infinite regress". (Popper, p. 5)

In your own words, explain the steps and two possible outcomes of the fourth/final kind of "deductive" test of a theory. (9-10)

PHI 2010 – Team-based Assignment: Problem of Induction Name: _____

In your own words, explain what we can and cannot infer with Popper's deductivist method of testing. (10)

For each line, do the premises support the conclusion?

Yes No *All pregnant people are female. Taylor is pregnant. So, Taylor is female.*
Yes No *All pregnant people are female. Taylor is female. So, Taylor is pregnant.*
Yes No *All pregnant people are female. James is not female. So, James is not pregnant.*
Yes No *All flowers have petals. And roses have petals. So, roses are flowers*.
Yes No *All flowers have petals. And roses are flowers. So, roses are flowers*.
Yes No *All flowers have petals. And bicycles don't have petals. So, bicycles are not flowers*.
Yes No *If it rains, then Joe won't go out. And Joe went out last night. Thus, it didn't rain last night.*
Yes No *If it rains, then Joe won't go out. And Joe didn't go out last night. Thus, it rained last night.*
Yes No *If it rains, then Joe won't go out. It rained last night. Thus, Joe didn't go out last night.*
Yes No *Politicians tell lies. And lies are dishonest. That is why politicians are dishonest.*
Yes No *Politicians <u>are</u> lies. And <u>all</u> lies are dishonest. That is why politicians are dishonest.*

What is the difference between a good deductive argument and a good inductive arguments?

Construct a <u>deductive</u> argument with <u>at least one false/implausible premise</u> that <u>supports</u> this conclusion: *Donald Trump is the President.* (Label premises 'T' for TRUE and 'F' for FALSE.)

What are the two rules of good arguments?

What is an appeal to intuition? Explain with an example. (I.e., list intuition's features and give an example.)