

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

**Complete the following sentences.**

Larry Laudan defines scientific progress in terms of “achieving \_\_\_\_\_.” (p. 2)

“Truth or apodictic certainty” are “\_\_\_\_\_ properties.” (p.2)

Laudan claims that “the aim of science is to \_\_\_\_\_  
\_\_\_\_\_.” (p.2)

For Laudan, science progresses “just in case \_\_\_\_\_  
\_\_\_\_\_.” (p. 2)

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

True False *Laudan thinks that the goal of science is to reveal the truth.*

True False *Laudan thinks that if science is supposed to reveal the truth, then science does not progress.*

True False *Laudan thinks that scientific progress is usually cumulative.*

True False *Both Laudan and Kuhn think that problem-solving is an important feature of science.*

True False *Both Laudan and Kuhn think that problem-solving is the distinctive feature of science.*

True False *Laudan thinks that theories are supported (i.e., more probably true) when they solve problems.*

**Complete the following arguments based on the corresponding prose.**

*(a) If the goal of science is transcendental (e.g., truth), then science cannot make progress on its goal. After all, we do not even agree on what we mean by ‘truth’ or how we are supposed to access it. But surely science makes progress on its goal(s). To deny that would be to suggest that science has not improved upon ancient elemental theory (that everything is made of elements like earth, air, water, fire) or geocentrism. And that’s absurd! So clearly, the goal of science is not transcendental.*

*If \_\_\_\_\_,  
then \_\_\_\_\_.*

*But \_\_\_\_\_.*  
*(We know this because if we) assume the opposite: that \_\_\_\_\_,  
then \_\_\_\_\_.*

*And that is absurd.*

*Therefore, it is not the case that \_\_\_\_\_.*

*(b) If science makes progress on its goal(s), then the goal of science is non-transcendental. And surely science makes progress on its goal(s). To deny that would be to suggest that science has not improved upon ancient elemental theory (that everything is made of elements like earth, air, water, fire) or geocentrism. And that’s absurd! So, clearly the goal of science is not transcendental.*

If \_\_\_\_\_,  
then \_\_\_\_\_.

And \_\_\_\_\_.

*(We know this because if we) assume the opposite: that \_\_\_\_\_*

then \_\_\_\_\_.

*And that is absurd.*

Therefore, it is not the case that \_\_\_\_\_.

*(c) If we can clearly demarcate science from pseudoscience, then distinctions between science and so-called pseudoscience would not obtain between the special sciences. But distinctions between science and so-called pseudoscience do obtain between the special sciences. For instance, some distinguish science from pseudoscience by claiming that one is predictive, testing its hypotheses only against the future outcomes of experiments, and the other is postdictive, testing its hypotheses against past outcomes. But that distinction also obtains between experimental sciences like and historical sciences like geology. So, clearly we cannot demarcate science from pseudoscience.*

If \_\_\_\_\_,  
then \_\_\_\_\_.

But \_\_\_\_\_.

Therefore, it is not the case that \_\_\_\_\_.

**Explain what Laudan thinks are the two “merits” of his (problem-solving) view of science (p. 2).**

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

True   False   *Laudan thinks the worth of a theory is relative to its rival theories. (p. 8-9)*

**Kuhn and Popper offered a “demarcation criterion between science from non-science”. Laudan calls these “an unqualified \_\_\_\_\_” (p. 8).**

**Classify the following claims according to the views of science we have discussed. Check all that apply.**

*Economics is unscientific because when its predictions fail, it does not abandon the corresponding theories.*

Deductivism/Falsificationism    Narrow inductivism    Wide Inductivism    Holism    Puzzle-Solving

*Psychology is scientific because when its predictions fail, it conducts more experiments to understand why.*

Deductivism/Falsificationism    Narrow inductivism    Wide Inductivism    Holism    Puzzle-Solving

*Astronomy is scientific because it is unbiased in its data collection; it just scans the skies until it finds patterns.*

Deductivism/Falsificationism    Narrow inductivism    Wide Inductivism    Holism    Puzzle-Solving

**Sy Entiss thinks that the aim of science is truth. “Sure,” they admit, “experiments cannot tell us which of our competing theories are conclusively true and which are conclusively not true, but experiments provide approximate truth.” You know that Larry Laudan thinks that this view of science has failed. Instead, Laudan thinks that the aim of science is problem-solving. Tell Sy Entiss about the two main kinds of problems that science solves, according to Laudan (pp. 2-3). And explain what it means for each kind of problem to be solved by a scientific theory (p. 4).**

**Sy Entiss isn’t having it. “How are we supposed to figure out which theories are better than others if we cannot appeal to truth?” Help answer Sy’s question by explaining how theories can be more or less “adequate” than a rival theory (p. 7) according to Laudan’s three-part of “cost-benefit-analysis” (p. 5).**