Part C: Answer this question with several paragraphs.
(15 points)

9.   In class, we considered the question of whether infants' ability to learn abstract rules from patterns in stimuli in the environment was a domain-general ability, or an ability that's specific to language. A group of researchers followed up on the apparent facilitatory effects of speech on rule learning with two competing hypotheses:

- Abstract patterns are vital for human communication, so maybe the infant's mind is predisposed to find regular patterns in any communicative signal.
- Infants have plenty of experience with speech stimuli, so maybe the familiarity of the stimuli makes it easier to learn regular patterns from speech.

The researchers created videos consisting of sets of ASL (American Sign Language) handshapes, arranged either in an AAB pattern or an ABB pattern. Infants (0;7) who had no experience of ASL were trained on these videos in one of the two patterns until they habituated by looking away. Then they viewed the test videos. Test videos included new handshapes that had not been included in the training videos. Half the infants were tested on a video with the same (consistent) pattern as training; half the infants were tested on the different (inconsistent) pattern from training. The results are depicted below:
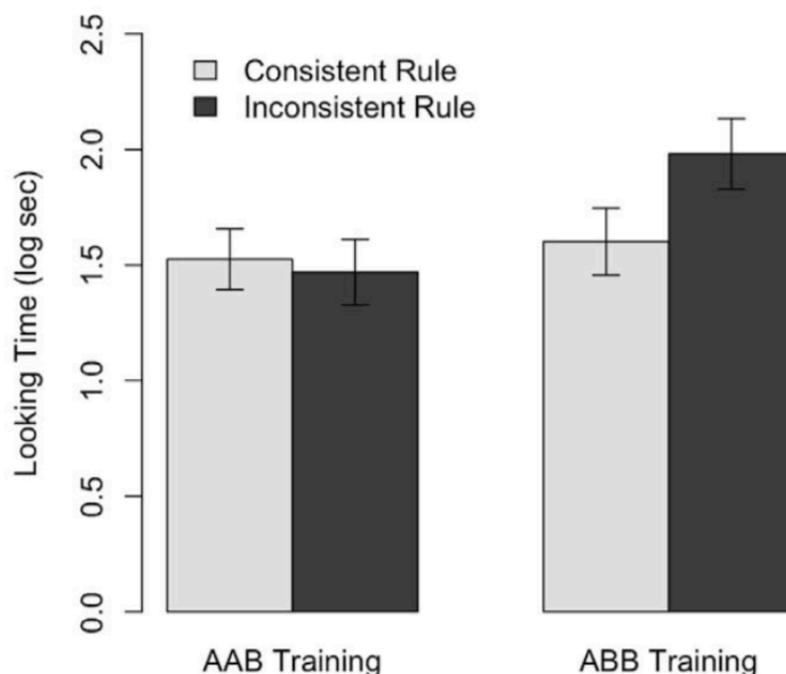

Figure 2. Looking times to consistent and inconsistent sequences during test trials, split by training rule.

Provide a summary of the findings discussed in class about abstract rule learning, concentrating on the question of whether the ability is domain-general or domain specific. (*6 points*)

Then discuss the results presented above, considering the following issues: (*9 points*)

- Why did these researchers choose stimuli from ASL?
- Give a concise, accurate description of the results depicted in the graph.
- How do these results compare with the findings of the studies discussed in class?
- How do these results bear on the two competing hypotheses summarized above?
- Is abstract rule-learning specific to language or is it domain-general?