Turing Discussion questions

Questions 1-9 + KN due Wednesday
1. Why does Turing argue that the question of machine minds must be re-framed?
2. How does Turing propose to answer the question of whether or not machines have minds?
3. Which mind-body theory does Turing seem to support with his argument regarding mechanical intelligence? Explain and describe what you think the strengths and weaknesses of this argument are.
4. List the objections to AI described in the article. What are the strengths and weaknesses of each argument? What are the strengths and weaknesses of Turing’s responses?
5. Which of the listed objections to machine intelligence do you think is the strongest? Explain your reasons.
6. Are there stronger objections to the argument for machine intelligence that are not listed in the article? Explain
7. Alan Turing believed that by 2000, machines would exist that could pass the Turing test approximately 30% of the time. This prediction did not come true. Why not?
8. Do you think machines are or will ever be capable of passing the Turing test? Explain.
9. In May, 1997 Deep Blue, a computer designed and programmed by IBM beat World Chess Champion Gary Kasparov to become the first machine to achieve victory over a world chess champion. a) Is this a better test of computer intelligence than that devised by Turing? Why or why not? b) If computers can beat chess champions why can’t they pass the Turing test? Explain.

Here is a link to a Turing style talkbot that you can “speak” with:

http://alice.pandorabots.com/

Sometime this week, try to “speak” with the talkbot and then answer the following questions. I would like to have a class discussion on the following questions (relating to your “conversation”) on Friday.

10. What is it about the talkbot’s responses that make it easy to know that you are conversing with a program and not a live person? What does this tell us about the nature of language and the relationship of language to personhood?
11. Does the Turing test confirm or deny what Descartes claims about the true nature of language? Explain.
12. What does the talkbot reveal about the actual limitations of digital intelligence? Specifically, what are the limitations (if any) you believe are present in all AI (not just the one we spoke with) that make it impossible for machines to engage in conversation in a way which is indistinguishable from human conversation.
13. It would be interesting to set up a Turing style test conducted over facebook, text message or AIM (does that still exist?) in which one person (A) used the talkbot to generate responses and a second (B) generated their own responses to the questions of a third person (C). Would the questioner (C) be able to distinguish the machine (A) from the person (B) if the person (B) tried to make the questioner believe he or she was the machine? What would this tell us about the nature of minds and the human use of language? I would certainly be open to giving extra credit for groups that conducted experiments and then wrote up their thoughts on the results and shared them with the class.