- 1a) I believe that intelligence isn't just knowledge but also the ability to apply knowledge to different situations and learn from past experiences and patterns. As technology advances I believe that the distinction between artificial intelligence and human intelligence becomes increasingly clear, challenging what we traditionally have thought of intelligence in the past.

 1b) I believe that artificial intelligence is how a computer/machine uses information to recognize patterns and 'learn' from what it's been given by the engineers or developers designing it.

 Artificial intelligence won't process stuff like humans or animals do but will follow logic and rules defined in its programming. Inherently as a different type of intelligence, artificial intelligence will perform better in certain tasks but worse in others that will be easy for humans/animals.
- 1c) I believe that rationality is a subset of logical thinking in a step-by-step manner. It's about using data, statistics, logical reasoning, and numbers to make decisions and choices. It can be seen as the opposite of emotional decision-making and the notion of following your gut. There are also subsets of rational thinking and rationality such as epistemic and instrumental rationality.

 1d) I believe that epistemic rationality can be described as making opinions and notions that are founded on data and logical reasoning. It's looking at the information presented and being committed, putting emotions, preconceived biases, and more non-logical methods of thinking to the side. It's also involved being able to update these opinions and notions when new information is presented. Consistently and constantly following the truth.
- 1e) I believe that instrumental rationality can be described as making decisions that can support achieving a certain end-goal. It includes using data and logical reasoning to make the decision that can improve the status of your situation, the program, or the model. It's not only about using

information and statistics to make the most logical decision overall, since certain end-goals and scenarios will result in separate logical decisions.

- 1f) I believe that reasoning can be described as the decision-making process of making your choices based on a series of assumptions from information that leads to your eventual decision. It's a step-by-step process where you develop these individual choices to make a larger more coherent decision for the scenario. It includes using information and identifying how they relate to one-another and using that to solve problems.
- 1g) I believe that logic can be described as the rules that one follows to make assumptions or their decisions. It can either be defined as part of your natural way of thinking, including morals, societal values, or more predefined rules of logic such as in engineering or psychology which ultimately support our assumptions in reasoning and eventual decision for the scenario.
- 1h) I believe that logical reasoning can be described as the set of assumptions made from logic that compile together to form reasoning. It's the step-by-step decision-making process that strictly follows their defined rules. Logical reasoning can be found very often in fields such as psychology, programming, and math. 1121
- 1i) I believe that artificial general intelligence can be described as the artificial intelligence that follows a set of defined patterns, rules, and assumptions from programmers to build its knowledge or pattern-recognition which it can apply to a variety of scenarios. It's not necessarily trained for specific tasks but can be naturally designed to perform certain tasks better than others. It's still flexible and can be designed to support a variety of scenarios somewhat similar to the way we do.
- 1j) I believe that artificial super intelligence can be described as the artificial intelligence that has improved to perform tasks at an efficiency that goes beyond human levels, generally these are

specifically trained and catered to these specific tasks but what they can be trained to do doesn't have as many limits. It also involved the aspects that are somewhat fictional and the levels that we have not trained these models to accomplish yet.

- 2) I believe that Turing's notions and developed thoughts on artificial intelligence are incredibly valid, including the refutations but also the objections are also valid. In its current state I believe that artificial intelligence is reaching levels of pattern-recognition and development that exceed his original notions. With these new levels however arises new objections, new issues, and incredibly increasing impacts. I believe turing's original five-minute Turing Test with an unskilled interrogator has an increasingly great chance at passing compared to the original thirty percent. In another fifty years I can only assume that this test will be most-definitely obsolete by then as human technology and innovation has exponentially been increasing, and in fifty years, I believe artificial intelligence will have reached incomprehensible levels.
- 3) The discussion and prompt can be seen as part of the conversation surrounding opinions from Neats and Scruffies, where the Neats would be in-favor of the mathematical level, and will prefer the efficiency this type of complex mathematical operations will be able to perform. The Scruffies would be hesitant as the average human would most-definitely not use these methods and will make these tasks less intuitive as the actual person has no idea how to do it.
- 4) I believe that AI's traditional focus on higher-level cognitive abilities is not misplaced. I believe that although the higher levels of capacities in their opinions of perception and motor skills are important, they would not necessarily encompass the most important aspects of intelligence. The ability to be able to make logical inferences way easier, and at levels better or comparable to humans allow artificial intelligence to accomplish tasks that are not intuitive to human methods of thinking. This allows it to accomplish more impressive tasks and the ability to

perceive and motor skills can be developed quicker with these already established. With this perception and motor skills without a high-level of thinking makes it less able than the high-level of thinking with less perception and motor skills.

5) The following tasks can be solved by a computer: buying a week's worth of groceries on the web, playing a decent game of bridge at a competitive level, discovering and proving new mathematical theorems, writing an intentionally funny story, giving competent legal advice in a specialized area of law, translating spoken english into spoken swedish in real time, driving in victorville california

The following tasks may be more difficult and not accomplish at the same level as the previous tasks: driving in the center of cairo,, playing a decent game of table tennis, performing a complex surgical operation

- 6a) Artificial intelligence and the studies of the philosophy of mind are incredibly intertwined as often-times new revelations in artificial intelligence and methods of building these models are developed and inspired by the ways our minds work. They try to replicate similar traits and characteristics that can support artificial intelligence to reach new levels of understanding and ability. I can immediately think of neural networks that are imaged and replicate the ways humans neural connections are made and they are clearly inspired by this and helped artificial intelligence reach new levels.
- (b) Similarly to the philosophy of the mind, in artificial intelligence the studies of cognitive science are incredibly intertwined where new remarkable revelations are inspired and mirror the human mind. Where cognitive science is in itself the study of the human mind and brain, artificial intelligence replicates understandings and knowledge we have been able to create. I would refer to the similar example of neural networks once again.

- 6c) I believe that cybernetics and artificial intelligence are not as intertwined but still related as cybernetics mostly in machines and living things involve communication and control. Artificial intelligence is learning and we've been able to make revelations by trying to support artificial intelligence from learning from mistakes and giving it data to be able to have communication and control.
- 6d) I believe that information theory and artificial intelligence are incredibly intertwined where information technology is the science of making sense of data, and in artificial intelligence it makes decisions and logical reasoning from analyzing data. Information theory supports revelations made in artificial intelligence through using strategies of analyzing data to use logic and reasoning for their specific purpose.
- 6e) I believe that physics and artificial intelligence are also heavily intertwined as artificial intelligence is often bound to physics and real-world boundaries so that it can be used in real life applications and provide real-world solutions. A clear example and this connection includes the way the automated navigating vehicle software is developed to understand and follow physics of vehicles in their speed, their qualities, and such to create applicable software. This is also included in other research involving artificial intelligence where physics is involved such as research in astronomy.