Class 02: Algorithms and Ethics
COMP 130 – Introduction to Computing
Dickinson College

Names: _____

A. The "Long Tail":

Q1: How would you explain the "long tail" in one sentence?

Q2: What are the three enabling characteristics that make the "long tail" possible?

Q3: What role do algorithms play in monetizing the "long tail"?

Q4: What are benefits of the "long tail" to:

a. Business

b. Individuals

c. Society

B. “Filter Bubbles” and “Rabbit Holes”:

Q5: How would you explain a “filter bubble” in one sentence?

Q6: How would you explain the “rabbit hole effect” in one sentence?

Q7: What enabling characteristics do “filter bubbles” and “rabbit holes” share with the “long tail”?

Q8: What personal and societal risks are associated with “filter bubbles” and “rabbit holes”?

C. The YouTube Business Model:

Q9: How does YouTube make money?

Q10: How does YouTube’s recommendation algorithm provide value for the user?

Q11: How does YouTube’s recommendation algorithm provide value for the business?

Q12: How might differences between providing value for the user and providing value for the business drive YouTube's recommendation algorithm in different directions?

Q13: What principles and mechanisms might be used to resolve situations in which these types of mis-alignments occur?

D. Other Algorithms (Optionally on your own later):

Q14: What are some other algorithms that you interact with every day?

Pick one of those algorithms and answer the following questions:

Q15: How does the company using that algorithm make its money?

Q16: How does the algorithm provide value for the user?

Q17: How does the algorithm provide value for the business?

Q18: How might differences between providing value for the user and providing value for the business drive the algorithm in different directions?

Q19: How might the algorithm change such that user values and business values are better aligned?