Social Networks Bonus

Super 2

ANUSTART TRIVIA
May 16, 2014
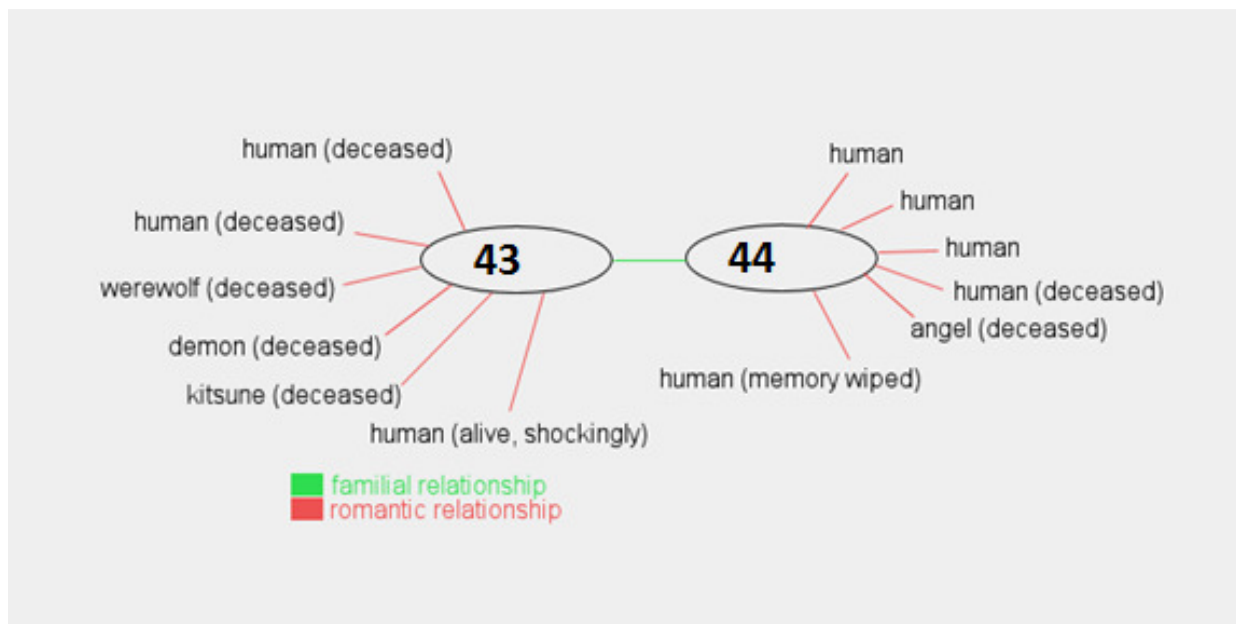
Identify the social network

Network #1 (Questions 1-17)

The edges in this social network represent dialogue between named characters. Note that 5&6 are interchangeable; 8 & 9 technically are not, but we'll be generous.

Network #2 (Questions 18-35)

The edges in this network represent relationships coded by the legend. All blanks are named characters who appear in at least one scene in a famous book. Note that 20 & 21 are interchangeable.

Legend:
- **Siblings**
- **Parent/Child**
- **Romantic Entanglement**
- **Cousin/Aunt/Niece**
- **Teacher/Student**
- **Employer/Employee**
- **Friend**
- **Other**

Network #3 (Questions 36-42)

The edges in this network represent social relationships during the first quarter of the twentieth century between the individuals listed. In addition to showing these relationships, the graph was designed to, roughly, illustrate relative geographical location. All blanks are real people.
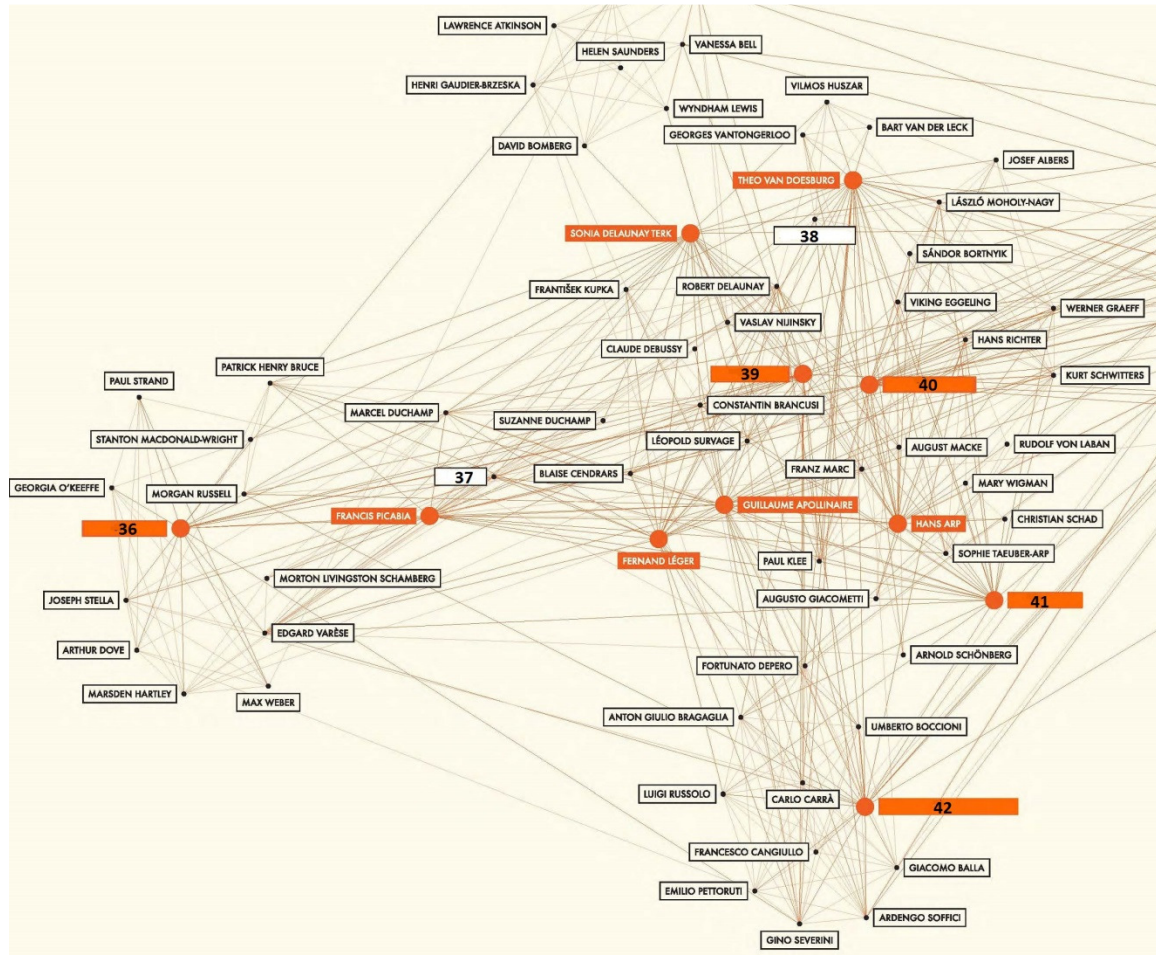
Network #4 (Questions 43-44)

Name the characters from a TV show based on the relationship information provided.

human (deceased)

human (deceased)

human (deceased)

werewolf (deceased)

demon (deceased)

kitsune (deceased)

human (alive, shockingly)

43

44

human

human

human

human (deceased)

angel (deceased)

human (memory wiped)

■ familial relationship
■ romantic relationship

Network #5 (Questions 45-62)

The edges in this network represent joint group affiliations or other major collaborative projects in the post-WW2 period. Due to the fluid nature of musical collaboration in this network, one-off performances and most side-man work is not included in the diagram.

Drums
Trumpet
Saxophone
Keyboards
Bass
Guitar
Vocals
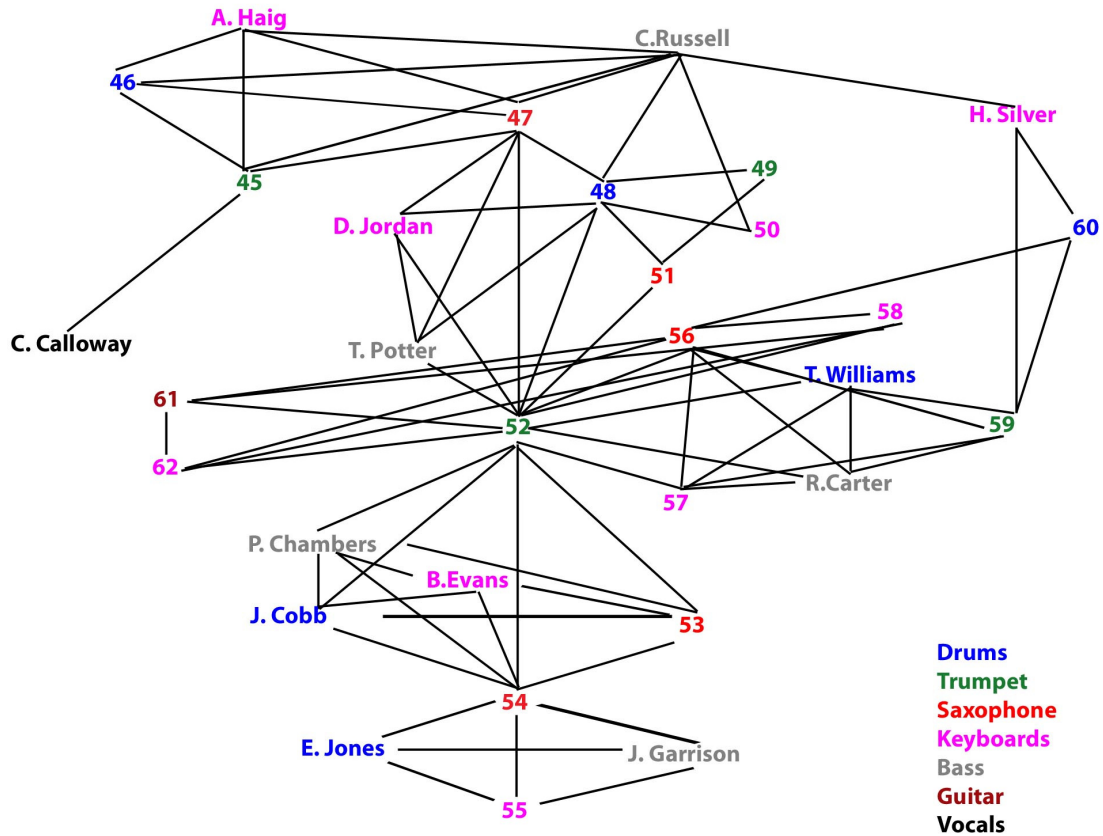
Network #6 (Questions 63-66)

Identify four of these 19 individuals, one in each of the four clusters, as identified by co-appearance in newspaper sources after an important historical event.
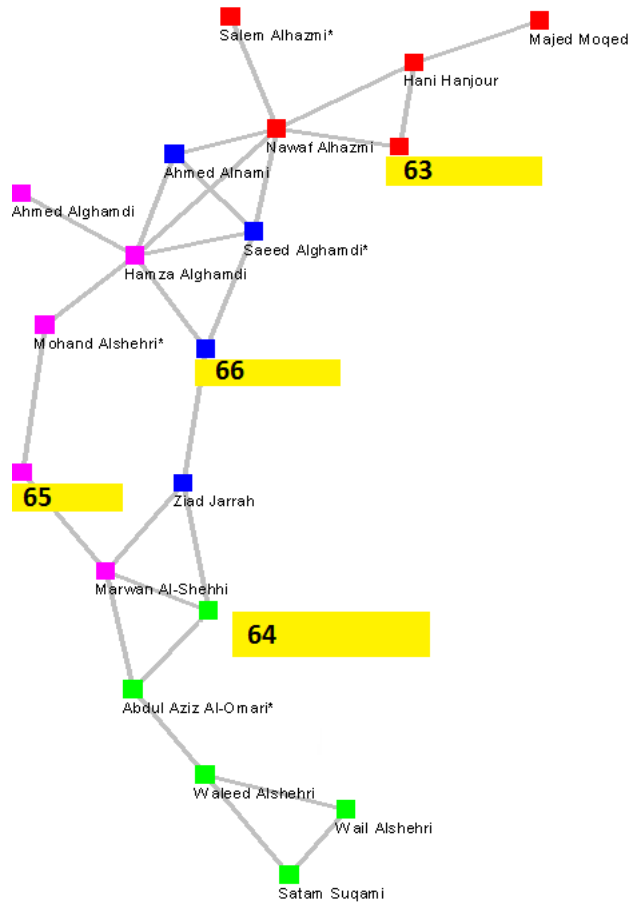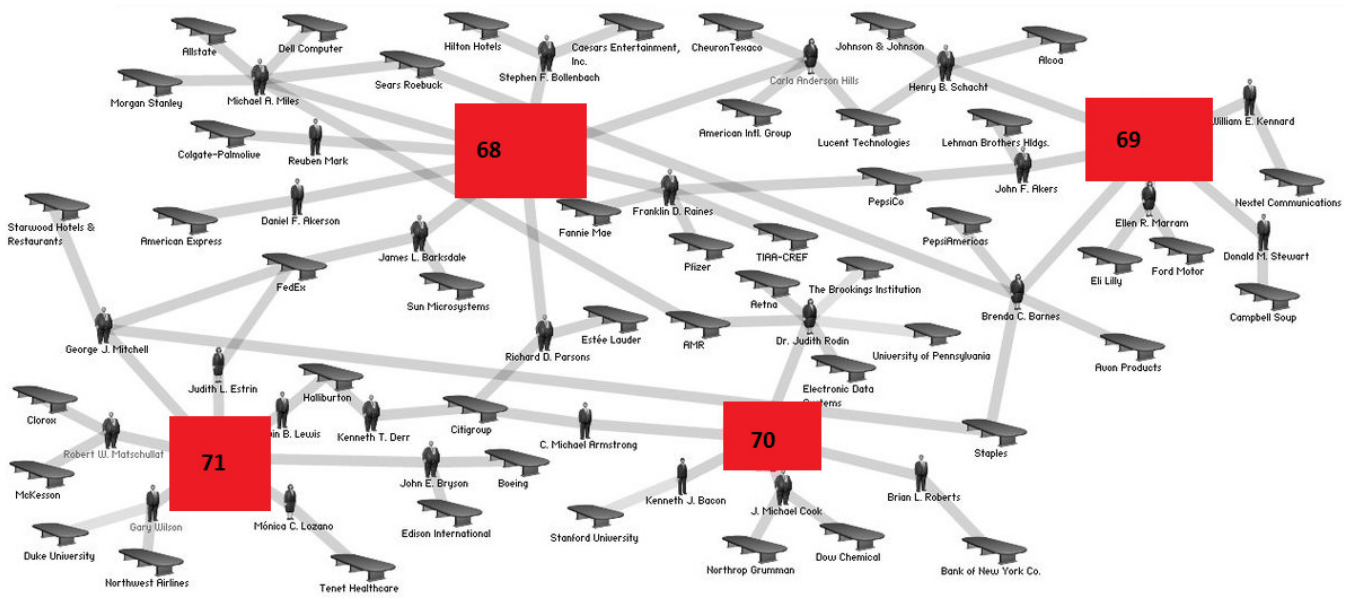
Network #7 (Question 67)

Identify the monk from this well-known example in the study of social networks. Alternately, for half credit, identify the name of the network.
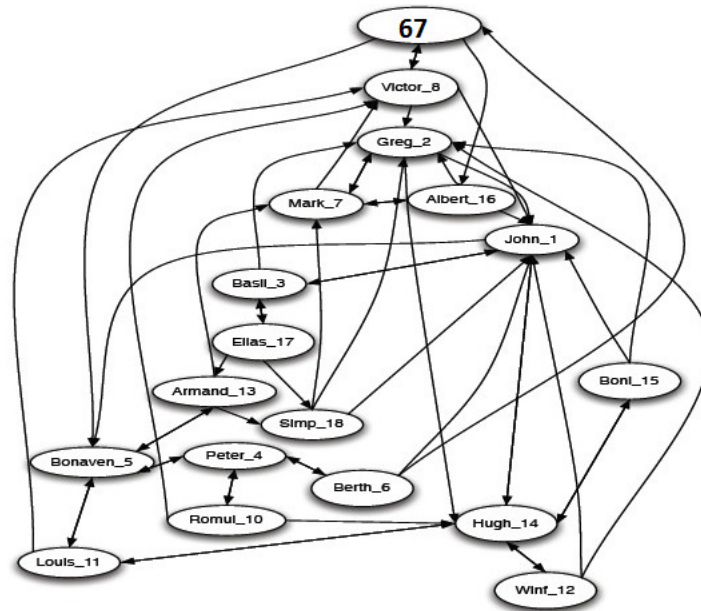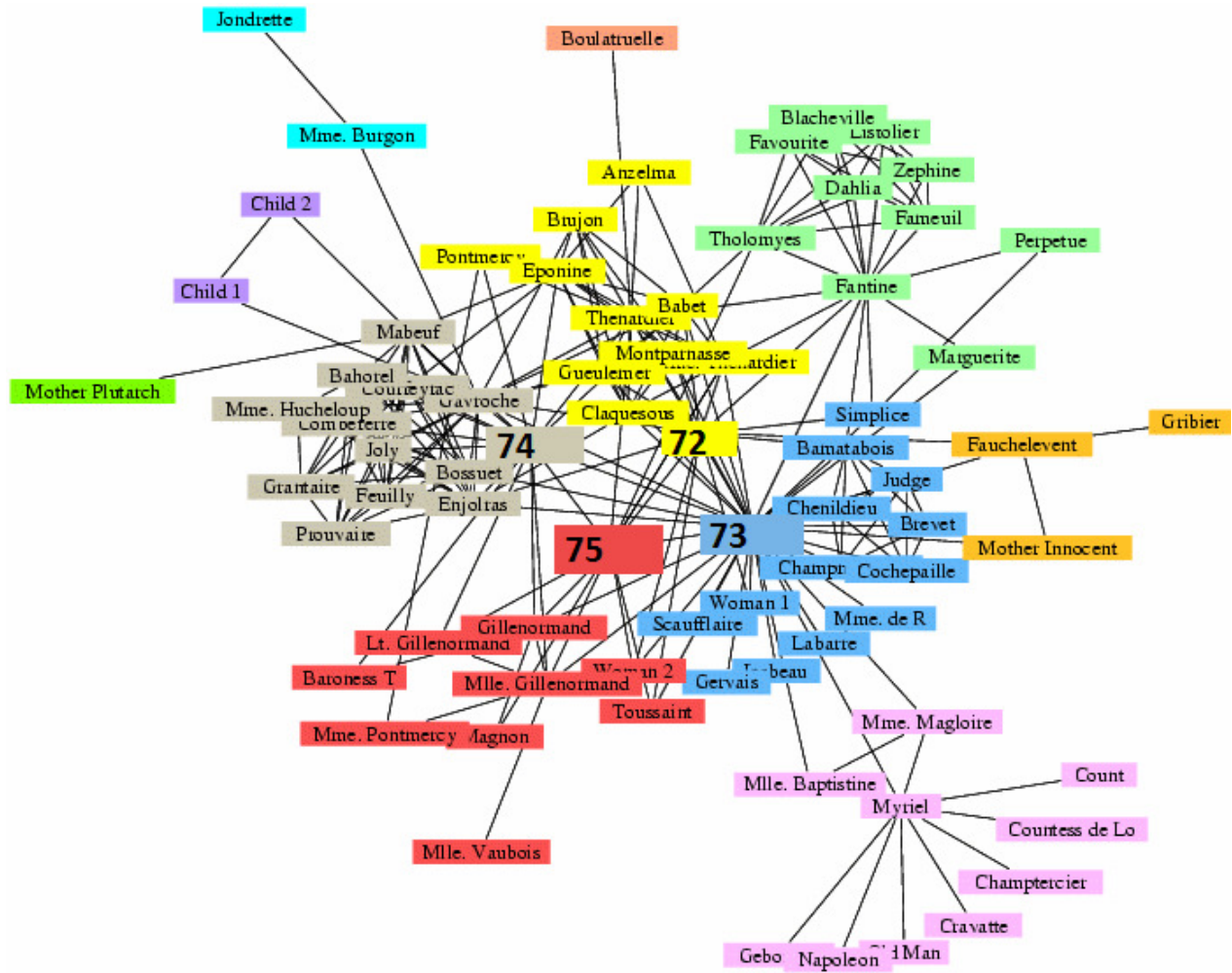
Network #8 (Questions 68-71)

Identify the companies in the red boxes in this "interlocking directorship" network that shows multiple individuals who sit on the boards of many different companies.
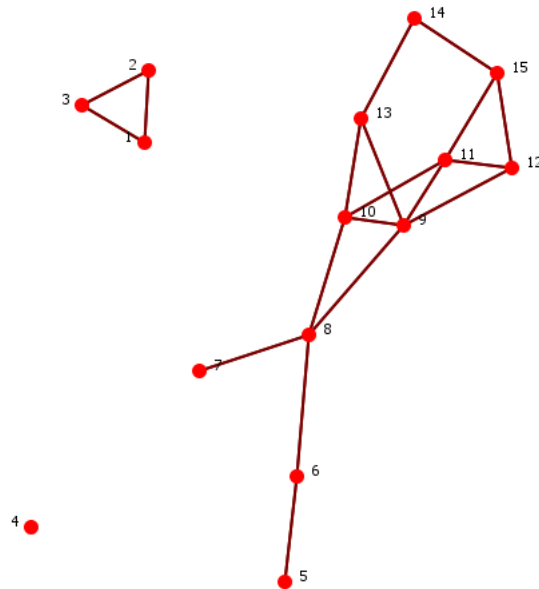
Network #9 (Questions 72-75)

Identify the book characters. Edges occur between individuals who occur together in one or more scenes.

Network theory

Use the below 15-node graph below to answer the following (Questions 76-85).

76. How many components are there in the network?

77. How many isolates are there?

78. Identify the node with highest degree centrality in the largest component

79. Identify the node with the highest betweenness centrality in the largest component

80. Identify the node with the highest eigenvector centrality in the largest component

81. What is the diameter of the largest component?

82. The structural position of node 15 is most similar to which of the other network nodes?

83. Suppose this is a terrorist network and the nodes are terrorists. If node 8 were removed by being captured, how many new components would be created?

84. Suppose this is a terrorist network and the nodes are terrorists. If node 9 were removed by being captured, how many new components would be created?

85. Suppose this is an organizational network and the nodes are managers. If node 9 gets hit by a bus, who is most likely to assume his role in the organization?
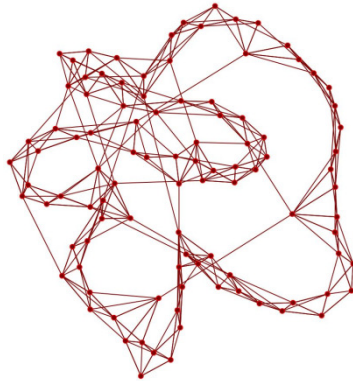
Canonical Networks

Multiple choice: are the following networks generated via an a) Erdos-Renyi random process, b) Scale free process, c) Small world process, or d) Cellular generation process (Questions 86-87)

86.
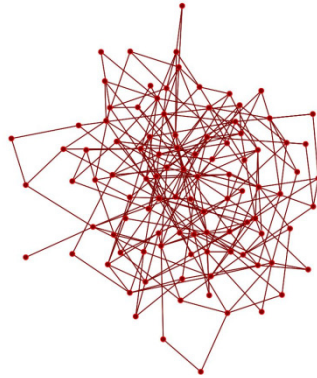
87.

Social Network terminology

Answer the following questions about terminology used in the analysis of social networks. For the non-social network experts out there, many of these terms are adapted from graph theory. (Questions 88-90)

88. What term is used to represent the fraction of all possible edges that are currently present in a network? For instance, this value is 0.2 in a graph of ten nodes containing eighteen directed edges (18/90)

89. What term is used to describe the total number of edges that leave a particular node in a directed network?

90. What term is used to describe a network that contains two different groups of nodes each of which can only be connected to nodes of the other type (eg, people and organizations, like in network #7 for questions 68-71)?

Famous Social Network Findings

Answer the following questions about famous social network findings (Questions 91-100)

91. What eponymous number, said to be about 150, represents the number of people with whom one can maintain stable social relationships and therefore can be said to represent a biological bound on one's effective social network size?

92. A 2007 paper by Christakis and colleagues, widely reported in the popular press, suggested that what medical condition was likely to develop in people who had friends also developed it?

93. The "corrupted blood incident" was an incident in which popular MMO (massively multiplayer online game) that has been used to study models of epidemiology and terrorism?

94. What idiom, allegedly due to a literal translation from Plato's Republic, has been used to describe the process of "homophily" in which people with similar attributes seek the company of each other?

95. What famous social finding by Stanley Milgram, derived from letters delivered to a Boston stockbroker, was actually based off a 20% response rate?

96. According to a google search, the minimum value for this number among current and/or former members of the Computer Science faculty at Williams is 3. What is this number, derived from co-authorship with a famous mathematician?

97. Which number has been shown to have a (current) maximum finite value of 11, according to an online site that analyzes actors?

98. The article "2007" was shown to be the center of which online website, requiring on average only 3.45 web links to reach any other article?

99. Mark Grannovetter hypothesized that the key relationships in social networks were not "strong ties" – ties that link family members and close friends – but instead were what type of ties?

100. Which Hollywood actress was alleged to have said "I don't know anyone who voted for Nixon" following the 1972 election – a phrase which pundits have used to attack the Hollywood elite as being isolated and out of touch with the rest of the country? (nb: there is controversy as to whether she actually said it)

Social network software

Answer the following about social well-known social networking platforms (Questions 101-115)

101. Facebook uses a distinctive blue color. Why was this color chosen, as opposed to, say, a red or green?

102. The two largest settlements against Facebook were awarded to what three individuals?

103. According to the Apple app store, what age restriction is placed on people wishing to download the Tinder app?

104. Which picture-sharing service was initially launched in July 2011 with the name "Picaboo"?

105. Facebook hasn't always been facebook.com. What domain name did it go by when it was first rolled out at Williams?

106. What pop singer/actor is a current part owner of Myspace?

107. Google's social network software, Google+, required the redesign of google's search algorithm since Google wanted the "plus" to refer to its social network site. What symbol is now used to represent the previous functionality of the plus symbol in web search?

108. The initial name for which social network service was "twttr" before being changed to its more recognizable name today?

109. What is the name of the most popular social networking site in Brazil?

110. Within 2%, what percentage of Tumblr blogs are estimated to be pornographic?

111. Obviously, almost anything goes on Tumblr. However, what type of blogs has been prohibited since February 2012?

112. What's the prime professional social network for university scholars?

113. In 2012, which major US social networking site with 10M+ users has the oldest average age among its users?

114. To within 5%, showing an item with a price tag on it will increase Pinterest pins by what percentage versus the same item without a price tag?

115. As of the beginning of May 2014, who is the currently most followed person on Twitter?

Social Networks in Popular Culture

Answer the following about social networks in popular culture, most of which have to do with people failing to recognize how powerful they can be (Questions 116-125)

116. Which company's #AskJPM twitter hashtag had to be taken down after it was pelted with abuse?

117. Which actor played Mark Zuckerberg in the 2010 movie about Facebook's early history?

118. An embarrassing moment for actor Spike Lee occurred when he re-tweeted David and Elaine McClain's Florida address to millions of people in 2012. Whose address was he intending to tweet at the time?

119. To within 5%, what percent of all 2011 divorces in the United States contained the word "Facebook" somewhere in the filing?

120. The NYPD attempted to generate goodwill in the city by asking its citizens to tweet pictures of the Finest in action. This backfired, however, when most of the tweets ended up depicting what?

121. Which short film, produced on behalf of a charity in March of 2012, was reportedly seen by nearly half of all US young adults within the first two weeks of its release thanks to a highly effective social media campaign?

122. Name any of the top five memes on the internet meme database (knowyourmeme.com).

123. According to a 2014 study, up to 36% of users who post what type of internet picture admit to retouching the images before posting?

124. Justine Sacco, communications director for the Internet giant that owns popular websites like Match.com, was fired for a racist tweet when leaving on a trip to Africa. What did she suggest protected her from getting AIDS on her trip?

125. Which organization has the following image as their logo?

Blogs are social networks too…

Provide us with the names of up to five blogs that you read regularly. We will score these boggle-style: you'll only get credit for the answer if no other team provides the name of a similar blog. Honor system – we obviously can't check to see if you read them regularly! (Questions 126-130)

126.
127.
128.
129.
130.

…And so is the news of the weird!

Provide us with links to the five weirdest stories you've read in the last week and shared with at least one other person via email or other social media. We will also store these boggle style. (Questions 131-135)

131.
132.
133.
134.
135.

Broadcast the contest!

We are giving you a social media account (twitter) to broadcast the contest. We will give you a point of credit for each follower you have on social media when we score the bonus. The follower doesn't have to play the contest, but does have to agree to follow you for at least a short period of time.

Please enter the names of the 15 followers you want scored in the fields provided. Boggle-style scoring – so make sure your followers aren't following any other teams (Questions 136-150)

Note that an additional bonus will be provided to the team with the most followers. We will also provide a bonus if you have "unique" followers such as Williams professors and/or presidents.

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