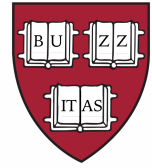


## Harvard Fall Tournament XI

Edited by Raynor Kuang and Robert Chu

Questions by Robert Chu, Raynor Kuang, Jason Park, Sriram Pendyala, Neil Gurram, Erik Owen, Jonathan Suh, Roger Jin, Vimal Konduri, and Mark Arildsen

And with thanks to Harvard College, MIT Quiz Bowl, and various playtesters



Round 10

Tossups

1. In one of this author's plays, Dumby asserts that "getting what one wants" is the worse of two tragedies and Cecil Graham asks "What is a cynic?" In that play by this author, the protagonist nearly elopes with Lord Darlington, leading (\*) her mother Mrs Erlynne to falsely claim to have left the title item. One of this author's plays describes an imaginary cousin named "Bunbury," as well as a character discovered as a baby in a handbag at Victoria Station. In that play by this author, Jack and Algernon both pretend to have the title name. For 10 points, name this playwright of *Lady Windermere's Fan* and *The Importance of Being Earnest*.

ANSWER: Oscar Wilde

2. A naive "grade school" algorithm with this complexity was improved by Karatsuba using divide and conquer. If all the elements are partitioned on one side of the pivot every time, quicksort has this complexity. This function of  $n$  is about the number of edges in a (\*) complete graph with  $n$  vertices. Selection and insertion sort both have this worst-case complexity, and big-O of [read slowly] " $n \log n$  plus two  $n$  plus  $n$  squared" approximates to this complexity. If both have  $n$  iterations, nesting a for-loop inside another for-loop takes this many iterations total. For 10 points, give this function of  $n$  that gives the number of entries in a matrix that has both  $n$  rows and  $n$  columns.

ANSWER:  $O(n^2)$  ["big-O of  $n$  squared"] (basically accept anything that mentions square; accept power of 2)

3. An initiate into this organization stole a fox and hid it in his cloak, then let it maul him to death rather than admit to stealing it. Those incapable of joining this organization were sent to the "Deposits" at Mount Taygetus, and it was symbolized by a capital lambda. The (\*) *agoge* was a training system for this organization, and Lycurgus helped to create it. This group was defeated at Leuctra, and like many similar organizations, it employed hoplites and the phalanx formation. Forces under Xerxes I demolished part of this group at Thermopylae. For 10 points, name this arm of a Greek city-state, 300 members of which were once commanded by Leonidas.

ANSWER: the army of Sparta (accept equivalents and synonyms, like military for army; prompt on partial answer)

4. Psalm 90 is traditionally attributed to this man, and neither his eyesight nor strength had declined when he died on Mount Nebo. This man's hand was struck with his leprosy and his staff turned into a snake in an episode on (\*) Mount Horeb, and he saved seven women from shepherds in Midian before meeting his wife Zipporah. This man's sister Miriam found him in some bulrushes, and his brother was Aaron. After being spoken to from a burning bush, this man eventually ascends Mount Sinai to receive the Ten Commandments. For 10 points, name this prophet who led the Israelites out of Egypt.

Answer: Moses

5. After breaking a window, one of this actor's characters realizes a sunglasses-wearing enemy is sensitive to light. In one appearance, this actor kills the bodyguard O'Hara after Interpol asks him to enter a competition to defeat a drug ring. This man defeated a character played by Kareem Abdul-Jabbar in (\*) *Game of Death*, which was incomplete at this man's premature death. This actor's son Brandon died in a shooting accident on the set of *The Crow*. This man starred in *Enter the Dragon*, founded the Jeet Kune Do system, and popularized the one-inch punch. For 10 points, name this 1970s Hong Kong-American film star and prominent martial artist.

ANSWER: Bruce Lee (or Lee Jun Fan; or Lei Jun Fan; or Li Zhenfan; or Lei Siu Long; or Li Xiaolong)

6. This man led a group including the former slave Dangerfield Newby, and while leading a constitutional convention in Chatham, Ontario, this man met with Harriet Tubman. Thomas Wentworth Higginson and the other members of the (\*) "Secret Six" collaborated with this man, and after the sacking of Lawrence, this man led an attack where his men hacked five settlers to death near Pottawatomie Creek in Kansas. Robert E. Lee successfully prevented this man from capturing a federal armory in what is now West Virginia. For 10 points, name this abolitionist who was hanged for leading an 1859 raid on Harper's Ferry.

ANSWER: John Brown

7. One piece in this genre is typically the last piece played by the Vienna Philharmonic in its New Year Concert. Three pieces of four hands were written in this genre by Franz Schubert, and one of these pieces was dedicated to Joseph (\*) Radetzky von Radetz. The third movement of Chopin's second piano sonata is this type of work for a funeral. One composer created pieces in this genre titled "Washington Post" and "Stars and Stripes Forever" and was an American known as the "King" of this genre. For 10 points, name this genre repeatedly used by John Philip Sousa, a type of piece that typically accompanies the steady walking of soldiers.

ANSWER: march

8. This character's daughters are abducted by his brother-in-law after he fails to abduct this man, who will bring fortune to the city he is buried in. This character enters a grove sacred to the Furies despite being prophesied to die there. This man eventually dies at (\*) Colonus, and he sends Creon to investigate a plague upon his city. A shepherd reveals receiving this man as a baby after he was left to die on Mt. Cithaeron. This father to Antigone killed Laius at a crossroads, despite Laius being his father, and he blinds himself after discovering he's slept with his mother. For 10 points, name this Greek figure, the title king of a play by Sophocles.

ANSWER: Oedipus (accept Oedipus Rex; accept Oedipus at Colonus)

9. One of this thinker's books criticizes people for making up new words in the section "Abuse of Words." This thinker argued for a psychological account of personal identity that inspired the insanity defence, and he argued using the example of a pineapple that ideas must come solely from (\*) experience. This philosopher espoused the empiricist principle of *tabula rasa*, and the Declaration of Independence borrowed from a work in which he argued people are endowed with natural rights including "life, liberty, and property." For 10 points, name this British philosopher who wrote *An Essay Concerning Human Understanding* and *Two Treatises on Government*.

ANSWER: John Locke

10. A social phenomenon in this country blames several killings on arguments over singing of Frank Sinatra's "My Way." The body of Michael Siaron is cradled by his mother in a Pieta-like photo taken here. This country's president failed to meet with (\*) Obama at a summit in Laos after calling him a "son of a[n expletive]." People accused of being "pushers" have become victims of vigilante killings in this country spurred by a former mayor of Davao, and its president Rodrigo Duterte began a national wave of violence against dealers and addicts. For 10 points, name this country undergoing a brutal drug crackdown centered in Manila.

ANSWER: Republic of the Philippines (or Republika ng Pilipinas)

11. **Anders Celsius lends his name to a barium-containing member of these minerals. A sodium-rich example of these minerals is albite, and a calcium-rich one is anorthite. Two of these minerals are used to name the QAPF diagram, and these minerals all have exactly eight (\*) oxygen atoms. One subclass of these minerals makes up the continuous branch of Bowen's reaction series, and another subclass defines 6 on the Mohs hardness scale. These minerals have orthoclase and plagioclase varieties. For 10 points, name these tectosilicate minerals that make up 60% of the Earth's crust, the most abundant mineral ahead of quartz.**

ANSWER: **feldspars** (accept plagioclase **feldspar** or orthoclase **feldspar** or alkali **feldspar**; anti-prompt [ask for less specific] if they just say plagioclase or orthoclase or alkali)

12. **In Slavic mythology, porcelain cups would be used to store the souls of those on whom the Vodyanoy inflicted this fate, and Rusalka were people who suffered this fate. In Mexico, a creature would inflict this fate while crying, "Oh my children!" and was named "La Llorona," or the (\*) "Weeping Woman." Tlaloc most notably ruled over people who died in this fashion, and the Scottish Kelpie would pretend to be a horse to try to inflict this fate on children. After he flew too close to the sun and his wings melted, Icarus died in this manner. For 10 points, name this manner in which the Atlanteans most likely died when their city sunk into the sea.**

ANSWER: **drowning** (accept anything involving dying in the water; prompt on dying and )

13. **One of this composer's arias is alternatively called the "Friendship duet," takes place "At the back of the holy temple," and is sung between Nadir and Zurga. One of his operas includes a seguidilla "near the ramparts of Seville" in which a character seduces a man in Lillas Pastia's inn. This composer of the (\*) Ceylon-set opera *The Pearl Fishers* wrote an opera that includes the Toreador Song and the Habanera, which calls a "love a rebellious bird." The title character of this composer's most famous opera falls in love with Escamillo and is stabbed by Don José in the bullfighting ring. For 10 points, name this French composer of the opera *Carmen*.**

ANSWER: Georges **Bizet** (or Alexandre César Léopold **Bizet**)

14. **One character in this book sets off four differently colored fires and repeats four nonsense words before repairing a leak in a well. A baby in this book is named "Hello-Central" by the protagonist's wife Sandy, and this book's protagonist uses a lightning rod to (\*) blow up a rival's tower. The protagonist of this book becomes known as "the Boss" and early in the book escapes execution by predicting a solar eclipse. After receiving a crowbar blow to the head in this book, Hank Morgan wakes up in 6th century England. For 10 points, name this satirical Mark Twain novel in which an American time-travels back to medieval Camelot.**

ANSWER: *A **Connecticut Yankee in King Arthur's Court***

15. **SILAC involves differentially labeling two populations of cells, then analyzing them with this technique. Using this method on compounds containing bromine produces results with two peaks of equal intensity 2 units apart on the x-axis. Phenyl groups are easily identifiable because they produce a value of (\*) 77 in this technique, and it usually reports a base peak of 100 on its  $m/z$  ["m over z"] scale. This technique measures the time-of-flight of fragmented ions, and then reports bar peaks based on ratios of its namesake value to charge. For 10 points, name this analytic technique in chemistry that, as its name implies, measures the weight of the fragments of a chemical compound.**

ANSWER: **mass spectrometry** (accept **MS**)

16. **This modern-day country was home to a kingdom led by Prempeh I, who was exiled for 24 years to the Seychelles before returning severely Westernized. Queen Yaa led a revolt in this country after Frederick Hodgson demanded an artifact sacred to its people, and Garnet Wolseley sacked its imperial capital of (\*) Kumasi. Osei Tutu founded an empire in this modern-day country that venerated a throne descended from heaven called the Golden Stool. For 10 points, name this modern-day country home to the Ashanti Kingdom, which was known as the Gold Coast under British rule until becoming independent under Kwame Nkrumah.**

ANSWER: Republic of Ghana

17. **Since 1957, the Théâtre de la Huchette has been continuously running one of this writer's plays that ends with the Maid bringing the Professor a new Pupil. In one of this writer's plays, an old man and woman set up the title objects for an (\*) absent audience, and he wrote a play set at a dinner full of non-sequiturs between the Smiths and the Martins. This playwright's most famous work was an allegory of Nazism in which everyone but Berenger turns into the title thick-skinned animal. For 10 points, name this Romanian member of the Theatre of the Absurd who wrote plays like, *The Chairs*, *The Bald Soprano*, and *Rhinoceros*.**

ANSWER: Eugene Ionesco

18. **A class of antidiabetic drugs called sulfonyl-ureas block a protein responsible for transporting this ion out of islet cells. In *Drosophila*, the Shaker gene is a channel for this ion, and the serum concentration of this ion is notably only 3.5 to 5.0 millimolar, and is elevated in (\*) hyperkalemia. The movement of this ion to the outside of the neuron is the cause of hyperpolarization. The bulk of this ion is found in the intracellular space, and through the use of active transport and a namesake ATP-dependent "pump," two of these ions are exchanged for every three sodium ions. For 10 points, name this positive ion of an element commonly found in bananas.**

ANSWER: potassium (accept K<sup>+</sup>; prompt if both sodium and potassium are given, as in sodium/potassium pump)

19. **Eight people retraced the Trail of Tears in 1992 to commemorate Choctaw aid during this event. During this event, 300 residents of Ballinlass were evicted from their homes, and many children began attending Protestant schools during this period as part of a practice known as (\*) "souperism." People boarded "coffin ships" in order to escape this event, and Robert Peel advocated for the repeal of the Corn Laws during this event. An island's population declined by 25 percent after the spread of a blight during this event. For 10 points, name this event in which the destruction of a namesake crop caused massive starvation on an island east of Britain.**

ANSWER: Irish potato famine (or the Great Famine; or the Great Hunger; accept basically anything about there being a famine or starvation in Ireland)

20. **A photograph taken in this city showing Greta Garbo in a candid moment began Bill Cunningham's career in this city. Photos in this city of a "Jewish giant" and a boy holding a toy hand grenade were taken by Diane Arbus, and Richard Drew captured a photo of an (\*) upside-down man backgrounded against a building he had just leapt from. *Falling Man* was taken in this city, as was a photo snapped by Albert Eisenstadt in 1945 showing a nurse being bent backwards and kissed by a sailor celebrating the end of World War II. For 10 points, name this setting of *V-J Day in Times Square*.**

ANSWER: New York City (or NYC; anti-prompt [ask for less specific] on specific boroughs)

21. **This author wrote about re-reading his old books in the introduction to his short story collection *Slow Learner*. In one of this author's stories, Callisto tries to nurse a bird to health and Meatball Mulligan holds a massive party. This author of (\*) "Entropy" described John Nefastis supposedly inventing Maxwell's Demon in a book in which a conspiracy involving the sign of a muted horn and a postal organization named Trystero is uncovered by Oedipa Maas. In one of this writer's books, Tyrone Slothrop tries to locate a German V-2 rocket. For 10 points, name this author of *The Crying of Lot 49* and *Gravity's Rainbow*.**

ANSWER: Thomas Pynchon

## Bonuses

1. This work posits that notions of masculinity and femininity are shielded from critique in a “heterosexual matrix.” For 10 points each:

[10] Name this 1990 work, the most famous by Judith Butler. In it, Butler mentions drag shows as examples of the “performativity” of the title concept, which, like sex, she claims is constructed.

ANSWER: **Gender Trouble**

[10] *Gender Trouble* is a seminal text of the “third-wave” form of this social theory. Another expounder of this theory was Simone de Beauvoir, who wrote about the oppression of women in *The Second Sex*.

ANSWER: **feminism** (or **feminist** theory; accept second-wave **feminism**; accept third-wave **feminism**)

[10] This thinker touched off second-wave feminism with a book based on a survey of alumnae of Smith College called *The Feminine Mystique*. She was also the first president of the National Organization for Women.

ANSWER: Betty **Friedan** (or Bettye Naomi **Goldstein**)

2. Famous users of this instrument include Elisabeth Schwarzkopf and Dietrich Fischer-Dieskau. For 10 points each:

[10] Name this instrument, which is accompanied by the piano in collections such as *Winterreise* and *Die schöne Müllerin*, which are notably both lieder.

ANSWER: the human **voice** (accept anything about **singing**)

[10] *Winterreise* and *Die schöne Müllerin* are both lieder-cycles, or song-cycles, by this Austrian composer, who used a hoofbeat-like piano part to accompany a baritone imitating a boy being possessed by the title spirit in his *Erkönig*.

ANSWER: Franz (Peter) **Schubert**

[10] Schubert set a poem by Matthias Claudius in this piece. This lied provides the theme for the second movement of Schubert’s fourteenth string quartet, which shares the same name.

ANSWER: **Death and the Maiden** (or *Der Tod und das Mädchen*)

3. One of these objects was used for reconnaissance during the Battle of Fleurus. For 10 points each:

[10] In a 1783 demonstration for the the royal court, the Montgolfier brothers placed a duck, a rooster, and a sheep in one of these objects. Humans were added a few weeks later.

ANSWER: hot air **balloon**

[10] These brothers were the first to achieve heavier-than-air flight in 1903 when their namesake “flyer” took off from Kitty Hawk, North Carolina.

ANSWER: **Wright** brothers (accept Wilbur and Orville **Wright**; accept **Wright** Flyer)

[10] This British aircraft manufacturer debuted the first commercial passenger jet, the Comet, in 1949. Their other innovative aircraft include the Mosquito, a wooden fighter-bomber made for the Royal Air Force in World War II.

ANSWER: **de Havilland**

4. For 10 points each, answer the following questions about the coolest clade in the animal kingdom:

[10] First name this group of aquatic mammals that includes the largest animal on Earth. The name of the cetacean clade comes from the Latin for this animal.

ANSWER: **whales** (accept blue **whale**)

[10] The tiny hindlimbs in cetacean skeletons are examples of this type of structure. Other examples of these structures include the human appendix and wings on flightless birds.

ANSWER: **vestigial** structures

[10] The population of this functionally extinct cetacean species was severely impacted by the construction of the Three Gorges Dam. Noise pollution from ships also prevents members of this species from using sonar to navigate.

ANSWER: **Yangtze** river **dolphin** (or **baiji**; prompt on just **dolphin**, I guess)

5. Verse 255 of this section is the “Throne Verse.” For 10 points each:

[10] Name this section, the longest in the work it appears in. Its Arabic name is “al-Baqarah,” and its title comes from a passage in which the Israelites refuse to perform a sacrifice commanded by Moses.

ANSWER: “The Cow” (prompt on “al-Baqarah”; **do not read this out loud if not given**, but prompt on “second chapter (sura) of the Quran”)

[10] “The Cow” is the longest of these chapters in the Quran. The Quran contains 114 of these chapters, and all of them except one begin with the Bismillah. Don’t confuse them with hadiths.

ANSWER: Surahs (or Surat or Sura)

[10] The 19th Surah is titled for this woman, and describes her giving birth to Jesus, who’s called “Isa” in the Quran.

ANSWER: Maryam

6. This character’s father receives a pension as the “most original moralist in England.” For 10 points each:

[10] Name this flower girl who’s trained by Henry Higgins on a bet into losing her Cockney accent.

ANSWER: Eliza Doolittle (accept either or both names)

[10] Eliza appears in *Pygmalion*, a play by this Irish playwright whose other works include *Arms and the Man* and *Major Barbara*.

ANSWER: George Bernard Shaw

[10] At a climactic moment in the play, Eliza throws these items at Professor Higgins in anger after he ignores and essentially discards her after successfully winning the bet.

ANSWER: slippers (prompt on something like shoes)

7. Water is called a “universal” one of these substances. For 10 points each:

[10] Name these substances that dissolve solutes, resulting in a solution. In green chemistry, scientists avoid using these substances wherever possible to reduce waste and pollution.

ANSWER: solvents

[10] This common lab solvent is protic is the simplest alcohol, containing a single carbon. It has the common name wood alcohol, but we want the IUPAC name.

ANSWER: methanol

[10] Unlike methanol, this other common lab solvent is aprotic. This solvent is a cyclic ether with four carbons, and it is the solvent of choice for hydroboration-oxidation reactions.

ANSWER: tetrahydrofuran (or THF)

8. In his dissent in this ruling, Robert Jackson wrote that military decisions were not always subject to civilian legal interpretation. For 10 points each:

[10] Name this 1944 Supreme Court ruling, which upheld the constitutionality of Executive Order 9066.

ANSWER: Korematsu v. United States

[10] At issue in *Korematsu* was the detention of American citizens of this ethnicity in places like Manzanar, which started shortly after the attack on Pearl Harbor.

ANSWER: Japanese-Americans (prompt on Asian; *Ed’s note: in all seriousness, accept Jap...but do please note the outdatedness of the term*)

[10] One challenge to Japanese internment arose when Mitsuye Endo filed for this type of writ, guaranteed by Article One, Section Nine of the Constitution. Abraham Lincoln suspended it during the Civil War.

ANSWER: writ of habeas corpus (prompt on you have the body and similar meanings, I guess)

9. In the aftermath of this event, *The Sun* published an inflammatory article headlined “The Truth” which claimed that people had urinated on police officers trying to help its victims. For 10 points each:

[10] Name this stampede, which killed 96 people at a 1989 soccer match between Liverpool and Nottingham Forest in the namesake stadium in Sheffield.

ANSWER: **Hillsborough** disaster

[10] The Hillsborough disaster occurred during the term of this Conservative Prime Minister, who was succeeded by John Major after attempts to introduce a “poll tax.”

ANSWER: Margaret (Hilda) **Thatcher**

[10] Thatcher had earlier been derisively called “Milk Snatcher” while serving as Secretary of State for *[this service]* and Science. Institutions that provide this service in Britain include Eton, Oxford, and Cambridge.

ANSWER: **education** (prompt on synonyms like teaching or schooling)

10. This character’s birth name is Agnes, the daughter of Paquette Guybertaut. For 10 points each:

[10] Name this beautiful Roma girl. Claude Frollo falls violently in love with her, setting off a series of events that lead to Quasimodo lying in her grave with her body.

ANSWER: **Esmeralda**

[10] Quasimodo is the title deformed bell ringer of this Victor Hugo novel. In a much sadder version than the movie, Esmeralda is taken from the title cathedral and hanged.

ANSWER: *The **Hunchback of Notre Dame*** (or ***Notre-Dame de Paris***)

[10] Quasimodo’s intentions are more or less good, but the also deformed title character of this Par Lagerkvist novel is pretty much evil. This book ends with the title character being imprisoned by his master, an Italian prince.

ANSWER: *The **Dwarf*** (or ***Dvärgen***)

11. For 10 points each, answer the following about the oeuvre of Benjamin West:

[10] West was inspired by the depiction of Christ in Lamentation scenes in arranging the figures of this work, which illustrates the last moments of the title general at the Battle of Quebec.

ANSWER: *The **Death of General Wolfe***

[10] This Founding Father appears at the center of five diplomats in an unfinished West portrait of the signers of the Treaty of Paris. Another West painting fancifully recounts an experiment in which he flew a kite in a thunderstorm.

ANSWER: Benjamin **Franklin**

[10] These two mythological figures grasp each other’s necks in a West painting. An Antonio Canova sculpture shows one of these figures being “revived” by the other.

ANSWER: **Cupid and Psyche** (prompt on partial answer)

12. This scientist’s 1924 thesis first proposed that all matter also behaved like waves. For 10 points each:

[10] Name this French physicist. His namesake equation states that a particle’s wavelength is equal to Planck’s constant divided by its momentum.

ANSWER: Louis-Victor-Pierre-Raymond, 7e duc **de Broglie** [“duh BROY”, but accept any reasonable pronunciation]

[10] This experiment confirmed a specific instance of de Broglie’s hypothesis by firing particles at a crystalline nickel target. The outcome of this experiment closely matched those predicted by Bragg’s law.

ANSWER: **Davisson-Germer** experiment (prompt on partial answer)

[10] The Davisson-Germer experiment used a beam of these leptons that are also found in cathode rays. J.J. Thompson discovered these particles that have a charge of minus one.

ANSWER: **electrons** (prompt on e<sup>-</sup>)

13. One chapter in this work describes Utsushemi discarding her robe like a cicada shell. For 10 points each:

[10] Name this early work written by Lady Murasaki about the title prince.

ANSWER: *The Tale of Genji* (or *Genji monogatari*)

[10] *The Tale of Genji* is often considered the first modern novel. Another work that may lay claim to the title is this Roman one in which Lucius turns into the title animal while trying to copy a witch's spell.

ANSWER: *The Golden Ass* (or *Asinus aureus*)

[10] In general, the early novel is similar to this other category of fictitious narrative, as evidenced by the word for novel in languages like French and Italian. An ancient Chinese work is usually titled for one of these works "of the Three Kingdoms."

ANSWER: romance (prompt on roman, I guess)

14. One "Grand Prince" of this city defeated the Teutonic Knights at the Battle on the Ice. For 10 points each:

[10] Name this city, the capital of a namesake Rus. Rurik had moved the capital to this city after gaining control of the land that would become that Rus.

ANSWER: Kiev

[10] This Grand Prince of Kiev allegedly declined to convert to Islam due to its prohibition on alcohol, instead Christianizing the Kievan Rus via a mass baptism in the Dnieper River.

ANSWER: Vladimir the Great (or Vladimir Sviatoslavich the Great; prompt on Vladimir)

[10] The Kievan Rus eventually crumbled under invasion by the Golden Horde and Batu, who held this title as leader of the Mongol empire. Other holders of this title included Ogedai and Genghis.

ANSWER: Khan (accept khagan)

15. Efforts to censor this film led its director to make the film *Intolerance*, which was released the following year.

For 10 points each:

[10] Name this film starring Lillian Gish based on a novel by T.F. Dixon, Jr. A fictionalized account of the founding of the KKK, it is probably the most famous creation of D.W. Griffith.

ANSWER: *The Birth of a Nation* (accept *The Clansman*)

[10] In the film, Griffith cast an actor with this surname who later directed Bob Hope in *Road to Morocco*. In *Gone With the Wind*, Clark Gable plays a character with this surname who quips, "Frankly, my dear, I don't give a damn."

ANSWER: Butler (accept David Butler; accept Rhett Butler)

[10] Because it was released in 1915, *The Birth of a Nation* has this characteristic. The first film *not* to have this characteristic was *The Jazz Singer*, which ushered in the era of "talkies."

ANSWER: it was silent (accept equivalents mentioning that there is no spoken dialogue)

16. Donald Trump may have hosted *The Apprentice*, but it's now your job to name these television shows featuring *fictional* Republicans. For 10 points each:

[10] Will Conway, the Republican governor of New York, runs for President against Kevin Spacey's character Frank Underwood in this current Netflix political thriller.

ANSWER: House of Cards

[10] Real-life Republican Fred Thompson played fictional Republican Arthur Branch on this show. This police procedural was created by Dick Wolf, and led to various spinoffs like *SVU* and *Criminal Intent*.

ANSWER: Law & Order (accept Law & Order: Trial by Jury; accept Law & Order: Special Victims Unit or Law & Order: SVU; accept Law & Order: Criminal Intent; prompt on Conviction; prompt on any subtitle listed above if Law & Order is not mentioned)

[10] One of Michael J. Fox's breakout roles was as supply-side economics fanboy Alex P. Keaton on this NBC sitcom depicting the generational clash of the 1980s.

ANSWER: Family Ties



17. In the *Prose Edda*, this god is said to be born of nine mothers. For 10 points each:

[10] Name this Norse god, a watchman who has golden teeth and guards the bridge Bifrost.

ANSWER: **Heimdallr** (or **Rig**; or **Hallinskidi**; or **Gullintanni**; or **Vindhler**)

[10] Heimdall will blow the Gjallarhorn to mark the start of this world-ending event in Norse mythology. Most of the gods will die during this battle, though the humans Lif and Lifthrasir survive.

ANSWER: **Ragnarök** (or **Ragnarøkkr**)

[10] Heimdall is also said to have retrieved Freyr's necklace Brisingamen by fighting its thief at Singasteinn while in the form of this animal.

ANSWER: **seals** (or **pinnipeds**)

18. The differential equation described by this adjective is contrasted with the "ordinary" variety. For 10 points each:

[10] Give this adjective that describes a type of derivative with a unique "backwards six" notation. That derivative described by this adjective is usually "with respect to" a particular variable.

ANSWER: **partial**

[10] This is the partial derivative of "y squared" with respect to  $x$ . Incidentally, it's also the regular derivative of any constant, as well as the slope of a flat line.

ANSWER: **zero**

[10] This entity is filled with the partial derivatives of every variable on every value in a vector valued function. The Hessian is formed by forming this entity with respect to the gradient.

ANSWER: **Jacobian** matrix

19. Name some things related to people attempting to make their fortune in California, for 10 points each:

[10] Bunny and Dad drill for the title resource in Upton Sinclair's novel *Oil!*. This much better known Sinclair novel centers on Jurgis Rudkus, who works at extremely unscrupulous meatpacking plants.

ANSWER: *The **Jungle*** (Ed's note: I sure hope you read that exclamation mark with gusto)

[10] Producer Monroe Stahr ascends through Hollywood in this author's *The Love of the Last Tycoon*. He also wrote *This Side of Paradise*.

ANSWER: F(rancis) Scott **Fitzgerald**

[10] Several gold miners raise Cherokee Sal's child as their own in this story, only for the title child to later die in a flood.

ANSWER: "The **Luck of Roaring Camp**" (Ed's note: the story is by Bret Harte)

20. In 2016, Teva's attempts at making a generic version of these items was rejected by the FDA. For 10 points each:

[10] Name these spring-loaded "pens" manufactured by Mylan and used to treat anaphylactic shock, as in allergies. They made headlines in 2016 after reports their prices had increased sixfold over the past few years.

ANSWER: **EpiPen** (prompt on **Epinephrine**)

[10] This CEO of Mylan faced heavy criticism for the price increases. She earlier was criticized for getting an MBA from West Virginia University despite not finishing the coursework, possibly because of her father, then-governor Joe Manchin.

ANSWER: Heather **Bresch** (prompt on Heather **Manchin**)

[10] In related news, this man was heavily criticized when his company Turing Pharmaceuticals bought the right to Daraprim then immediately hiked the price. In other news, he purchased the only copy of the Wu-Tang Clan album *Once upon a Time in Shaolin*.

ANSWER: Martin **Shkreli**

21. At one point, the speaker of this poem calls the song he hears a “Chorus Hymeneal / Or triumphal chant.” For 10 points each:

[10] Name this poem describing the speaker’s experiencing hearing the song of the title bird. It begins “Hail to thee, blithe Spirit!”

ANSWER: “**To a Skylark**” (do not accept or prompt on “*Ode to a Skylark*”)

[10] “To a Skylark” is a poem by this Romantic poet, whose other poems include “Ode to the West Wind,” and one about a crumbling statue titled “Ozymandias.”

ANSWER: Percy Bysshe **Shelley**

[10] Shelley also wrote this long poem about the title fairy, who descends to earth and shows Ianthe fantastic visions of the future and a utopia.

ANSWER: **Queen Mab**; *A Philosophical Poem; With Notes*