Finals

Tossups

(Tossup 1) In a novel by this author, Joseph is shocked to find that a young widow has befriended her cousin Hareton. A novel by this author opens with Lockwood renting Thrushcross Grange, a manor near the title house. This author wrote a novel in which the foundling Heathcliff terrorizes the Earnshaw and Linton families. For the point, what author of *Wuthering Heights* is the sister of fellow authors Anne and Charlotte?

ANSWER: <u>E</u>mily <u>**Brontë**</u> (prompt on Brontë)

(Tossup 2) This empire conquered the neighboring Sosso after Sundiata Keita won the Battle of Kirinia. The University of Sankore was founded by a leader of this empire. While participating in the hajj, a leader of this empire legendarily gave away so much gold in Egypt that he devalued its price. Timbuktu was a center of learning in, for the point, what African empire led by Mansa Musa?

ANSWER: **Mali**

(Tossup 3) Linear programming is used to solve a class of these problems, which usually contain several constraints. Stationary points are candidates for solutions in these sorts of problems due to containing local extrema. An example of this sort of problem asks for the largest volume of a box that can be constructed from a rectangular piece of cardboard. For the point, name this class of problems which seek to find the "best" possible value of a function.

ANSWER: **optimization** (accept linear **optimization**; accept answers referring to **finding the maximum** or **finding the minimum**)

(Tossup 4) This quantity can be calculated by taking the arithmetic mean of the first ionization energy and electron affinity. This quantity was related to effective nuclear charge by Allred and Rochow. Fluorine has the highest value of any element for this value, which is measured on the Pauling scale. For the point, name this quantity that measures the ability to attract electrons.

ANSWER: **electronegativity**

(Tossup 5) A proto-cubist stone sculpture by Brâncu și [bran-KOOSH] with this title shows two blocky figures crossed by overlapping bands that resemble arms. A Klimt painting with this title shows two figures wrapped in gold and embracing. A sculpture created by Rodin as part of his *Gates of Hell* shows Paolo and Francesca da Rimini performing this title action, inspired by the story of Lancelot and Guinevere. For the point, name this action often performed by lovers.

ANSWER: **kiss** (accept **Sarutul**; accept Der **Kuss**)

(Tossup 6) One of these leaders was executed by Jahangir in 1606 for refusing to convert to Islam, and was the son of another of these people, Ram Das. Arjan Dev was the fifth holder of this religious title. The tenth holder of this title, Gobind Singh, introduced the Five Ks. This title was held by Nanak Dev and his ten successors, the last of which is the holy text called the Adi Granth. For the point, give this title for religious leaders in Sikhism, which is also a generic term for a spiritual teacher.

ANSWER: **Guru** (prompt on "Sikh leaders" or similar answers)

(Tossup 7) The protagonist of this novel calls the people around him "phonies" and is disgusted by the habits of his roommate Stradlater. One of the protagonist's prized possessions in this novel is a baseball mitt with poems written on it. That character wonders where Central Park's ducks go in the winter and is expelled from Pencey Prep. For the point, what is this novel by J.D. Salinger, about the wanderings of Holden Caulfield?

ANSWER: The **Catcher in the Rye**

(Tossup 8) The kinematic form of this quantity is known as momentum diffusivity. This quantity is constant for Newtonian fluids. This quantity is variable with respect to shear forces in thixotropic fluids such as ketchup. The Navier-Stokes equations give describe movement for liquids with nonzero values for this quantity.. For the point, name quantity measured in poise that refers to a fluid's resistance to flow.

ANSWER: **viscosity**

(Tossup 9) One side in this battle, led by Cuthbert Collingwood, divided its forces into two lines, instead of the usual single line. Before its start, flags were used to spell the message "England expects that every man will do his duty" from the HMS Victory. For the point, name this 1805 naval battle in which Horatio Nelson destroyed a Franco-Spanish fleet.

ANSWER: Battle of **Trafalgar**

(Tossup 10) The term "compassion fatigue" was coined to describe decreased sensitivity towards people with this condition. In 2019, the Supreme Court ruled that Boise, Idaho could not outlaw people with this condition. Aggressive architecture such as spikes and uneven benches are used to repel people with this condition. For the point, name this condition in which a person has no place to live.

ANSWER: **homeless**ness

(Tossup 11) A woman with this first name has an affair with the banker Dmitri in Anton Chekhov's story "The Lady with the Dog." Another woman with this first name travels to Saint Petersburg after her brother Stiva cheats on his wife, Dolly, and has a lengthy affair with the nobleman Count Vronsky before she commits suicide by jumping in front of a train. For the point, give this first name of Leo Tolstoy's character Karenina.

ANSWER: **Anna** (accept **Anna** Sergeyevna or **Anna** Karenina)

(Tossup 12)   A member of this family, who became Governor of New York in 1959, served as Gerald Ford's Vice President. A donation by a member of this family to the American Baptist Society resulted in the creation of the University of Chicago. Ida Tarbell wrote a scathing report on a company founded by a member of this family which was broken up by the Sherman Antitrust Act. For the point, name this wealthy family that included the founder of Standard Oil, John D.

ANSWER: **Rockefeller**

(Tossup 13)   One form of this disease has its severity diagnosed using Breslow Thickness and Clark Level. That form of this disease may develop from abnormal moles or freckles. Animals with albinism are at increased risk of contracting this condition which may be prevented with broad spectrum sunscreen. Melanoma is a type of, for the point, what type of cancer which can be caused by exposure to UV light.

ANSWER: **skin cancer**

(Tossup 14)   This man names a generalization of induction called infinite descent. One theorem named for this man states that [a to p minus 1 is congruent to 1 modulo p.] That is this man's "little theorem." This man conjectured that for [n greater than 2,] the equation [x to the n plus y to the n equals z to n] has no integer solutions. For the point, name this French mathematician whose "last theorem" took over three hundred years to solve.

ANSWER: Pierre de **Fermat** (accept **Fermat**'s method of infinite descent; accept **Fermat**'s little theorem; accept **Fermat**'s last theorem)

(Tossup 15)   In one story, a woman with this name sat at the feet of Jesus instead of helping her sister prepare their home. Another biblical woman with this name had "seven demons" driven out of her, and was conflated in medieval times with a prostitute. A woman with this name was told "do not be afraid" by an angel who announced her pregnancy. For the point, give this name shared by the sister of Martha, the Magdalene, and the mother of Jesus.

ANSWER: **Mary** (accept **Miryam**; accept **Maria**)

(Tossup 16)   This President was criticized by the activist organization ACT UP for ignoring the AIDS crisis. The "Jusy Say No" campaign was created by this man's wife to support his war on drugs. Arthur Laffer helped this politician created his namesake economics. The Iran Hostage Crisis contributed to this man's defeat of Jimmy Carter. For the point, name this President of the United States for most of the 1980s.

ANSWER: Ronald **Reagan**

(Tossup 17)   The leader of a group named for this street, Wiggins, tracks down a cabby who is actually Jefferson Hope in disguise. Mrs. Hudson is the landlady and housekeeper of a property on this street. The "irregulars" named for this street are a group of boys who help solve a crime in *A Study in Scarlet*. Dr. Watson records the adventures of a resident of this street. For the point, name this London street where Sherlock Holmes resides at number 221B.

ANSWER: **Baker** Street (accept **Baker** Street Irregulars)

(Tossup 18)   The Chaeropus was the only marsupial to possess these structures. Even toed animals with these structures are called artiodactyls while odd-toed animals with these structures are called Perissodactyls. Animals which possess these structures are known as ungulates. For the point, name these toenail like structures that cover the feet of animals like deer, pigs, and horses.

ANSWER: __hoof__ (accept __hooves__; prompt on feet; prompt on toes before read; prompt on nails before "toenail" is read)

(Tossup 19) This piece is dedicated to Liverpool's Alfred Rodewald, and is the first of a set of six military marches. This work includes a trio whose tune is used for the hymn "Land of Hope and Glory" and is sung at the Last Night of the Proms in London. A tradition began when this piece was used to celebrate its composer at Yale. For the point, name this piece by Sir Edward Elgar that is traditionally played at high school graduation ceremonies.

ANSWER: __Pomp and Circumstance__ March(es)

(Tossup 20) This man's wife, a member of the Gang of Four, was sentenced to death in 1981. This man labeled rodents, flies, mosquitos, and sparrows as "four pests" that needed to destroyed in 1958 campaign. During the Chinese Civil War, this man came to prominence after leading the Long March. The Cultural Revolution and Great Leap Forward was devised by, for the point, what Communist leader of China whose sayings are collected in the Little Red Book?

ANSWER: __Mao__ Zedong (accept Chairman __Mao__; accept __Mao__ Tse-tung)

(Tossup 21) This city's characteristic dialect, sometimes called Yat, is depicted in John Kennedy Toole's novel *A Confederacy of Dunces*. The Elysian Fields neighborhood of this city is the setting of a play in which Stella refuses to leave her husband despite his sexual advances towards her sister, Blanche DuBois. For the point, what Louisiana city is the setting of the Tennessee Williams play *A Streetcar Named Desire*?

ANSWER: __New Orleans__

(Tossup 22) In 2019, this country promised to give a "Christmas present" to the United States, which was widely interpreted as a missile test. Former NBA star Dennis Rodman has been accused of acting as a go between for Donald Trump and this country. This country is separated from its southern neighbor by the DMZ. For the point, name this country ruled by Kim Jong Un from Pyongyang.

ANSWER: __North Korea__ (accept People's __Democratic Republic of Korea__)

(Tossup 23) An account of this war contains a Catalogue of Ships and begins by describing the "rage" of a hero with an ornate shield. During this war, Epeius led the effort to build a wooden structure to infiltrate the legendary walls of the title kingdom. At the beginning of this war, Agamemnon and Odysseus set sail to the title land to reclaim the Spartan princess Helen from Prince Paris. For the point, name this mythical Greek war described in Homer's *Iliad*.

ANSWER: __Trojan__ War

(Tossup 24)   An artist from this country depicted a red mountain against a cloudy sky in *Fine Wind, Clear Morning*, which he created with a woodblock printing style called ukiyo-e [oo-kee-oh-ay]. Other prints from this country include *The Great Wave off Kanagawa*, a work created by Hokusai, an Edo artist. For the point, name this home country of the *Thirty-Six Views of Mt. Fuji*.

ANSWER: **Japan** (accept **Nihon**-koku or **Nippon**-koku)

(Tossup 25)   These objects cause a form of erosion that is known as plucking. Volcanoes that erupt under these objects are known as tuyas. Tarns are lakes found in depressions made by these objects. Moraines are a terrain of rocky debris left behind from these objects. Icebergs break off of these objects in a process called "calving." For the point, name these massive, slow moving ice sheets.

ANSWER: **glacier**

(Tossup 26)   The city of Fort Peck lies along this river and is where the Milk River flows into this river. This river's two sources are the Hell Roaring Creek and Firehole River. Cities along this river include Sioux City and Great Falls, as well as Kansas City. For the point, name this longest tributary of the Mississippi River, which shares its name with a state home to St. Louis.

ANSWER: **Missouri** River

(Tossup 27)   This character shows a Montenegran war medal to a companion as they ride in a car to New York City. A book titled for this character was originally intended to be called *Trimalchio in West Egg*. George Wilson shoots and kills this man in the pool of his mansion after his affair with Daisy Buchanan is exposed. Nick Carraway narrates a novel about, for the point, what "great" title character of an F. Scott Fitzgerald novel?

ANSWER: **Jay Gatsby** (accept either name; accept The Great **Gatsby**; accept James **Gatz**)

(Tossup 28)   According to legend, the first holder of this position, Frederick Muhlenberg, prevented German from becoming an official language of the United States. Langdon Cheves replaced Henry Clay in this position but was replaced by Clay just one year later. In 1947, the holder of this position was made second in the presidential line of succession, ahead of the comparable president pro tempore of the Senate. For the point, name this head of the House of Representatives.

ANSWER: **Speaker** of the United States **House** of Representatives

(Tossup 29)   This body's north pole is surrounded by a hexagon-shaped band of clouds. A feature of this planet contains a massive gap called the Cassini Division. The shepherd moons of Prometheus and Encke orbit this plan which is also orbited by the massive Titan. The Great White Spot is located on, for the point, what sixth planet from the sun, noted for its large ring system.

ANSWER: **Saturn**

(Tossup 30) In *Utah v. Evans*, the Supreme Court ruled that hot deck imputation may be used for this action. In 2019, Federal Courts ruled that this action may not include questions about U.S. citizenship. This action is the basis for apportioning seats in the House of Representatives. For the point, name this action taken every 10 years to count the residents of the U.S.

ANSWER: **census** (prompt on descriptions like "counting people")

Tiebreakers

(Tossup 31) The spine cheeked variety of these animals is in the genus Premnas. Every other species of this animal is in the genus Amphiprioninae. Over the course of their lifetime, these animals develop from undifferentiated, to male, to female. The most popular variety of these animals to own as pets have orange and white stripes. For the point, name these fish that live in anemones.

ANSWER: **clownfish** (accept **anemone fish** before anemone is read)

(Tossup 32) One figure from this country declared that he knew what fishes wanted and had also stated that he could not know if he was a butterfly or not. One book from this country describes the title concept as the "uncarved block." That book from this country also outlines the concept of "non-action," or wu-wei. For the point, name this home country of Daoist figures such as Zhuangzi and Laozi.

ANSWER: **China** (accept **Zhongguo**)