

Finals

Tossups

(Tossup 1) A character created by this author moves to Brazil after she is arrested for visiting the mobster Sally Tomato in prison. A “nonfiction novel” by this author centers on the murder of the Clutter family in a Kansas farm. This author’s childhood friendship with Harper Lee inspired the character of Dill in *To Kill a Mockingbird*. For the point, name this author of *In Cold Blood*, who created Holly Golightly in *Breakfast at Tiffany’s*.

ANSWER: Truman Garcia Capote

(Tossup 2) This leader, whose father was executed two years after being overthrown in Operation Fair Play, went into self-exile in Dubai after losing a 1997 election. This leader’s government faced several controversies, including the assassination of her brother Murtaza and a corruption scandal involving her husband, Asif Ali Zardari. This leader of the PPP was assassinated in December 2007. For the point, name this first female Prime Minister of Pakistan.

ANSWER: Benazir Bhutto

(Tossup 3) NASA’s AEROS satellites studied this region’s F layer, which splits into two layers during the day. Kennelly and Heaviside name another layer in this region that reflects radio waves, allowing for trans-oceanic wireless communication. Solar radiation is responsible for the creation of the namesake particles of this region at one edge of the magnetosphere. For the point, name this region of the Earth’s atmosphere, named for the charged particles it contains.

ANSWER: ionosphere (prompt on atmosphere; prompt on thermosphere; prompt on magnetosphere until it is read)

(Tossup 4) This type of creature prevented Mount Mandara from sinking into the sea during the Churning of the Ocean of Milk. Le Loi legendarily returned “Heaven’s Will” a golden sword, to a creature of this type. Ox bones and a body part of these animals were commonly used as oracle bones in the Shang dynasty. In Hinduism, four elephants hold up the world while standing on the back of one of these creatures. For the point, name these reptiles, often honored for their longevity, whose shells were often used in medicine.

ANSWER: turtle (accept tortoise)

(Tossup 5) In a novel by this author, Fanny Robin accidentally jilts Frank Troy, who instead marries Bathsheba Everdene. This author wrote about Richard Phillotson’s wife, Sue Bridehead, leaving him and having a son nicknamed “Little Father Time” with her cousin, Jude Fawley. In another novel by this author, a boy named Sorrow is born to Alec and the title woman, Miss Durbeyfield. For the point, name this English author of *Far from the Madding Crowd*, *Jude the Obscure*, and *Tess of the D’Urbervilles*.

ANSWER: Thomas Hardy

(Tossup 6) This leader's government took over a newspaper called *Zaman* after allegations of the paper's ties to the *Hizmet* movement. The Justice and Development Party is led by this man, who accused Fethullah Gülen of corruption in 2013. In 2012, this man began unsuccessful negotiations with the PKK's Kurdish leaders. Secularism is championed by this politician, who once served as Mayor of Istanbul. For the point, name this current leader of Turkey.

ANSWER: Recep Tayyip **Erdogan** ([air-doh-ahn], but be lenient)

(Tossup 7) An effect with this name describes how increased concentration of carbon dioxide in the blood leads to a decrease in oxygen's association with hemoglobin. A scientist with this last name worked with Heisenberg to develop the Copenhagen interpretation of quantum mechanics; that scientist with this last name also created a model of the hydrogen atom based on planetary orbits. For the point, give this last name of Danish physicist Niels.

ANSWER: **Bohr** (accept Niels (Henrik David) **Bohr**; accept Christian (Harald Lauritz Peter Emil) **Bohr**)

(Tossup 8) A police commissioner in this state told FBI informant Gary Rowe he would have 15 minutes to attack the Freedom Riders. James Hood and Vivian Malone were prevented from registering at this state's flagship university by a governor who performed the "Stand in the Schoolhouse Door." George Wallace governed this state where protesters were attacked on the Edmund Pettus Bridge. For the point, name this state where Rosa Parks sparked a bus boycott in Montgomery.

ANSWER: **Alabama**

(Tossup 9) Trombonist Juan Tizol and this man composed the song "Caravan." A song composed by this man for radio was renamed from "Dreamy Blues" to "Mood Indigo." Billy Strayhorn's trip to meet this man inspired a tune that includes the line "to go to Sugar Hill way up in Harlem." This composer's namesake orchestra often played "Take the 'A' Train." For the point, name this jazz pianist and composer with a noble nickname.

ANSWER: Edward Kennedy "Duke" **Ellington**

(Tossup 10) This problem's reformulation in terms of Frey curves allowed the application of the epsilon conjecture, which was proven by Ken Ribet in 1986. A decade later, the Taniyama-Shimura conjecture was proven by Andrew Wiles; this finished the solution of this problem in over 100 pages of proof, far more than the margin of a textbook, where it was originally stated in 1637. The equation $x^n + y^n = z^n$ is the subject of, for the point, what famous problem of mathematics, named for a Frenchman?

ANSWER: **Fermat's Last** Theorem

(Tossup 11) In this novel, Napoleon is told "you are looking at a good man, and I at a great man" by Charles Myriel, who earns the nickname Monsieur Bienvenu while serving as the Bishop of Digne [deen]. In this novel, Euphrasie is rescued from the Sargent de Waterloo pub by Monsieur Madeleine at the request of her mother, Fantine, and never learns that her adopted father is a former convict pursued by Inspector Javert. For the point, name this novel by Victor Hugo about the life of Jean Valjean.

ANSWER: Les **Misérables** (do not accept or prompt on "Les Mis")

(Tossup 12) This region was discovered in 1888 by an assistant of Edward Pickering named Williamina Fleming. This region, which is silhouetted against a similar one named IC 434, is sometimes known as Barnard 33 and is often visualized in infrared. This celestial object is found south of its constellation's star of Alnitak and is to the east of Sigma Ori. For the point, name this nebula within the constellation Orion whose swirls resemble an animal.

ANSWER: Horsehead Nebula ("Nebula" not needed after it is read)

(Tossup 13) This national park reaches its highest elevation at Elephant Butte, and a popular site in this national park is its Balanced Rock. The Fiery Furnace is found in this park. An underground salt bed is thought to be responsible for the creation of the namesake features of this national park. Found just north of the town of Moab, for the point, name this national park in Utah, known for its namesake sandstone formations.

ANSWER: Arches National Park

(Tossup 14) This religion grew out of the support for Charles Taze Russell's beliefs, and publishes a bimonthly magazine called *Awake!* This religion is rooted in the Bible Student Movement, and it is overseen by the Watch Tower Society. This religion's places of worship are Kingdom Halls, and adherents of this religion do not participate in pagan-influenced celebrations like Christmas or birthdays. For the point, name this Christian denomination known for door-to-door preaching.

ANSWER: Jehovah's Witnesses (accept Bible Student Movement or BSM before "Awake" is read)

(Tossup 15) The Aburi Accord attempted to prevent a civil war in this country; that meeting was attended by the Supreme Military Council and Chukwuemeka Ojukwu. In this country, dictator Sani Abacha was deposed by the "Coup from Heaven." The creation of Doctors Without Borders was prompted by a war in this country over the breakaway region of Biafra. For the point, name this West African country governed from Abuja.

ANSWER: Republic of Nigeria

(Tossup 16) Mutations in the superoxide dismutase or SOD1 gene is the major genetic cause of this disease. This disease can be bulb-onset or limb-onset. This progressive disease first causes muscle weakness, paralysis and then difficulty swallowing and breathing. For the point, name this neurodegenerative disease that affected the recently deceased Stephen Hawking and is also named after a Yankees baseball player.

ANSWER: ALS or Amyotrophic lateral sclerosis or Lou Gehrig's disease

(Tossup 17) This battle resulted in the capture of the "Convention Army." Frederick Riedesel led German troops at this battle, which included fighting at Bemis Heights. During this battle, a group of snipers led by Daniel Morgan mortally wounded Simon Fraser. Horatio Gates defeated John Burgoyne at, for the point, what 1777 battle in New York that prompted France to join the American Revolution?

ANSWER: Battle of Saratoga (accept Battle of Bemis Heights before it is read)

(Tossup 18) This painting's subject may have been petit Louis, a Parisian child who exemplified a "local type" to the artist, who created this work during his Rose Period. This painting's background is a ruddy brown wall painted with roses in a shape that resembles wings on the back of this painting's subject, who wears a garland of flowers on his head. For the point, name this painting by Pablo Picasso in which a young man in blue casually holds the title smoking device.

ANSWER: Boy with a Pipe (accept Garçon à la pipe)

(Tossup 19) A character in this novel learns to read from *The Chemical and Bacteriological Conditioning of the Embryo*, and resents that Popé brings mescal to Linda. John causes an uproar in this novel when he calls "Tomakin" his father, and tells Mustapha Mond that he has a "right to be unhappy." Lenina Crowne and Bernard Marx take a trip to see natural-born people who do not use soma in this novel. For the point, name this novel by Aldous Huxley about a dystopian society made up of Alphas, Betas, and Epsilons.

ANSWER: Brave New World

(Tossup 20) This thinker may have called Edmond Halley or Isaac Newton an "infidel mathematician" in the subtitle to his book *The Analyst*. In *A Treatise Concerning the Principles of Human Knowledge*, this philosopher claimed that "ideas can only resemble other ideas," an example of his immaterialism. For the point, name this Irish philosopher who studied vision, wrote *Three Dialogues between Hylas and Philonous*, and names a school in the University of California system.

ANSWER: George Berkeley

(Tossup 21) This short story collection's fictional author has a conversation with a book in Westminster Abbey in the short story "The Mutability of Literature." This collection claims to have been written by a native of Tarry Town, and includes a story in which the spirits of Henry Hudson's crew play nine-pins in the Catskill Mountains. Two stories credited to the fictional historian Dietrich Knickerbocker appear in, for the point, what collection of short stories by Washington Irving that includes "Rip Van Winkle" and "The Legend of Sleepy Hollow?"

ANSWER: The Sketch Book of Geoffrey Crayon, Gentleman

(Tossup 22) This element's appearance in Tollens' reagent accounts for the mirror it produces when aldehydes are present. To artificially produce rain, this element's iodide is used to seed clouds. Despite having the highest conductivity of all metals, the cost of this element has prevented its use in electronics. This element's common mineral forms include chlorargyrite [clor-arj-ur-rite] and argentite. For the point, name this element with atomic number 47 and symbol Ag.

ANSWER: silver (accept argentum until "argentite" is read; accept Ag before it is read)

(Tossup 23) This position was temporarily held by William Howard Taft IV after the Senate refused to confirm John Tower. Robert McNamara held this office for over seven years, where he helped develop the Flexible response to nuclear threat. This office was created by the National Security Act of 1947, which allowed it to absorb the former Department of War. For the point, name this Cabinet-level position based in the Pentagon that oversees the protection of the United States.

ANSWER: Secretary of Defense

(Tossup 24) A cello sonata dedicated to Auguste Franchomme was one of this composer's nine works that were not written for piano. This composer's Opus 28, No. 4 was a prelude played at his funeral. This composer dedicated a piece inspired by the November Uprising to his "friend Franz Liszt." Another work by this composer was inspired by a dog chasing its own tail. For the point, name this Polish composer of the *Revolutionary Etude* and the "Minute Waltz."

ANSWER: Frédéric Chopin

(Tossup 25) A number is described as a Mersenne number if it is found by performing this action on a power of 2. A stereographic projection will do this to the number of dimensions of the objects involved. If a polynomial has degree n , the degree of its first derivative is found by doing this. This process happens to the exponent of a monomial, like x to the a power, when it is divided by x . For the point, name this action that, when applied to three squared, gives two cubed.

ANSWER: subtracting one (accept equivalents like minus one, going down by one, etc.; accept descriptions of "a power of 2, minus 1" or "2 to the n (power) minus 1" during the first sentence; prompt on partial answers like "subtract(ion)")

(Tossup 26) The Zaza Reservoir is located in this country's province of Sancti-Spiritus. This country lies to the northeast of the Gulf of Batabano, which separates it from the Isle of Youth. Sierra Maestra National Park lies on the southern shores of this island. The United States Navy leases land along this country's Guantanamo Bay. A marker on Key West states that it is 90 miles from, for the point, what Caribbean country whose capital is Havana?

ANSWER: Cuba

(Tossup 27) The speaker of this poem passes both a school where "Children strove / At Recess - in the Ring" and a "House that seemed / A Swelling of the Ground." This poem's speaker finally surmises that "the Horses' Heads / Were toward Eternity" while riding in a carriage that "held but just Ourselves / and Immortality." For the point, name this poem whose title figure "kindly stopped for" the speaker, written by Emily Dickinson.

ANSWER: Because I could not stop for Death

(Tossup 28) Cells that make up these structures show dark Z-lines within lighter I-bands under a microscope. These structures contain the largest known protein, titin. These structures are activated by cholinergic receptors. The Sartorius is one of the longest examples of these structures in the human body, while the gluteus maximus is the largest. For the point, name these force-producing structures such as the triceps and biceps which grow from lifting weights.

ANSWER: muscles

(Tossup 29) One image of this event shows Edward Daly waving a white handkerchief while helping victims. This event was investigated by the Widgery Tribunal and the Saville Inquiry. Members of the NICRA were killed by the Parachute Regiment during this event at the height of The Troubles. For the point, name this 1972 massacre of peaceful protesters by British soldiers in Derry, Northern Ireland, named for its violent occurrence on a certain day of the week.

ANSWER: Bloody Sunday (accept Bogside Massacre)

(Tossup 30) A cult associated with this woman developed in Hellenistic Laconia, and she was abducted by Theseus in her youth. The Oath of Tyndareus protected the chosen suitor of this woman, who was the daughter of Zeus and Leda and was born from an egg. After she was abducted from her husband, Menelaus, this woman was described as “the face that launched a thousand ships.” For the point, name this mythical woman who eloped with Prince Paris, setting off the Trojan War.

ANSWER: Helen of Troy

Replacements

(Tossup 31) This poem describes the “mast and spar” of a “phantom ship” that crosses “the moon, like a prison-bar.” This poem states that “hardly a man is now alive” who remembers the central figure traveling “to every Middlesex village and farm” after waiting for a signal to show “one if by land, and two if by sea.” For the point, name this Longfellow poem that commands, “listen, my children, and you shall hear / of the midnight ride of” a man who warned American colonists of the arriving British.

ANSWER: Paul Revere’s Ride