

2024 ACF Nationals

Packet X, Emergency Packet 2 by Berkeley B, Florida A, Michigan A, Virginia A

TOSSUPS

1. In a novel by a member of this family, a biracial dancer who wields a red whip on stage as “Princess Tebab” is cast off by a sycophantic fictionalization of the actor Gustaf Gründgens. A member of this family prompted a debate over “inner emigration” with radio speeches that broke with his longtime claim to be a “nonpolitical man.” The author of *Mephisto* was the brother of a member of this family who studied Nazi education in *School for Barbarians*, obtained a British passport by marrying W. H. Auden, and drove overnight to Munich to rescue a 1,500-page tetralogy by her father. Klaus and Erika’s father from this family fictionalized György Lukács (“g’YORG loo-KOTCH”) as the terror-loving Jesuit Naphta, who spars with the humanist Settembrini in a novel set in Davos. For 10 points, name this family of the author of *Joseph and His Brothers* and *The Magic Mountain*.

ANSWER: **Mann** family [accept Thomas **Mann** or Paul Thomas **Mann**; accept Erika **Mann** or Erika Julia Hedwig **Mann**; accept Klaus **Mann** or Klaus Heinrich Thomas **Mann**]
<European Literature>

2. This event’s unequal land titles led to the Natural Resources Transfer Acts examined in *Let the Eastern Bastards Freeze in the Dark*. A song decried a wolf’s “cheap tea and molasses” to protest this event, whose namesake group of poets wrote *Vagabondia* and *Orion*. After a 1916 fire burned Robert Harris’s painting of this event’s 72 resolutions, its namesake hall opened in the Centre Block. The numbered treaties are dated from this event, which was targeted for repeal by Joseph Howe’s Antis (“ANN-tize”) and defined as a compact of two races by Henri Bourassa (“on-REE boo-rah-SAH”). In 1997, this event’s namesake bridge spanned the Northumberland Strait. The Great Coalition nurtured this event’s original “Fathers,” who drafted the British North America Act after the Charlottetown Conference. For 10 points, Expo 67 marked the centennial of what event that formed the Dominion of Canada?

ANSWER: **Confederation** of Canada [or Canadian **Confederation** or **Confédération** canadienne or word forms of **confederated**; accept **Charlottetown** Conference until read; accept **Québec Conference** or **London Conference**; accept Fathers of **Confederation**, **Confederation** Bridge, **Confederation** Hall, **Confederation** Poets, **Confederation** Group, or “Anti-**Confederation** Song”; prompt on federal **union** of Canada or **federation** of Canada or equivalents; reject “Canadian independence” or equivalents] (Mary Janigan wrote *Let the Eastern Bastards Freeze in the Dark*. The poets are Bliss Carman and Charles G. D. Roberts.)
<Other History>

3. Until the 2010s, this city’s demographics made it “Test City, USA” for chains to premiere new products. Louie Simmons led Westside Barbell in this city, which hosts the Arnold Classic. The eccentric Circus House stands in this city’s Victorian Village, which was served by streetcars with iconic arches. It’s not located on a lake, but this city’s former enclaves include German Village and Hungarian Village. This city hosts the largest Bhutanese-American community and ranks second after the Twin Cities for its Somali population in areas like Northland and the Short North. This city forms a combined statistical area with Zanesville and Marion, which houses the tomb of Warren G. Harding. This state capital grew around the Scioto (“sye-OH-tuh”) River, the site of its Genoa Park and replica of the *Santa Maria*. For 10 points, OSU is located in what capital of Ohio?

ANSWER: **Columbus**, Ohio [or **Columbus**, OH; accept **Cbus**; accept Greater **Columbus**; accept **Columbus**–Marion–Zanesville, OH Combined Statistical Area] (OSU is The Ohio State University.)
<Geography>

4. In the aftermath of these events, metrics like ANPP experience a time-lag in their response to SPI or SPEI. David Tilman provided quantitative evidence for the diversity–stability hypothesis using data from one of these events at Cedar Creek. In the 1977 research season, Peter and Rosemary Grant found that one of these events produced adaptations on the scale of millimeters over the course of a single generation. Salt stress and these events promote glycine betaine (“BEET-uh-eeen”) accumulation that improves tolerance. These events select for Galápagos finches with larger beaks, while a typical El Niño does the reverse by increasing the frequency of soft foods. Historical examples of these events correspond to a thin summer ring in a tree’s core. For 10 points, name these periods that increase wildfire risk and cause water stress.

ANSWER: **droughts** [accept meteorological **droughts** or ecological **droughts**; accept **drought** tolerance; prompt on **dry seasons** or descriptions of **water shortages** or **low rainfall**]

<Biology>

5. A review of one of this artist’s paintings says that a “Kosegarten effect” causes the viewer to feel as if their “eyelids were cut off.” The low horizon of a painting by this artist creates a “luminous void,” according to a book by Robert Rosenblum that links this artist to Mark Rothko. Johann Christian Dahl owned a painting by this artist that inspired *Waiting for Godot*. Basilius von Ramdohr attacked the genre of an altarpiece by this artist with a gilt frame in which the Eye of God is surrounded by wheat and vines. This artist’s *Woman at a Window* depicts his wife Caroline Bommer, whom he painted looking at chalk cliffs. David d’Angers (“da-VEED dawn-JAY”) praised the “tragedy of landscape” of paintings like this artist’s *The Abbey in the Oakwood*. For 10 points, Heinrich von Kleist was deeply disturbed by *The Monk by the Sea* by what German Romantic artist?

ANSWER: Caspar David **Friedrich** (The altarpiece is *Cross in the Mountains*.)

<Painting & Sculpture>

6. This operation names a method that places a new point at the mean of the adjacent nodes of a numerical solution, which is a popular mesh smoothing technique. An operator formed by applying this operation to itself appears in the Föppl–von Kármán (“FURP-ul von CAR-mahn”) equations and is zero for the Airy stress function. This operation corresponds to a 3D Green’s function of minus one over “4 pi times the magnitude of r minus r -prime,” which is used to solve equations that set this operation of the potential as proportional to density. Elastic membrane frequencies correspond to eigenvalues of this operation, as found in the Helmholtz equation. According to the [emphasize] *multi-dimensional* wave equation, the second partial time derivative of u equals [read slowly] c squared times this operation on u . For 10 points, what operation equals the divergence of the gradient?

ANSWER: **Laplacian** [or **Laplace** operator; accept **del squared** or **nabla squared**; accept **Laplacian** smoothing; prompt on **delta**; reject “del” or “nabla” or “divergence”]

<Physics>

7. Paul Ormerod labeled this action as a pervasive “iron law” with biological analogies like the “Edwardian Explosion.” Don Keough included “love your bureaucracy” in his “ten commandments” for this action, which Sim Sitkin identified as “intelligent” when it is thoughtful and small-scale. The Altman equation predicts this action from multiple discriminant analysis of financial ratios. Souvenirs of breakups in Zagreb inspired a Swedish museum about this action in Helsingborg that exhibits the Olivetti Envision and Bofors toothpaste. To perform this action “fast” is a “mentality” of startups similar to the mantra to do it “better” from Samuel Beckett’s *Worstward Ho!* Businesses are often advised to “learn from” this action, which emblematically happened to New Coke. For 10 points, Lehman Brothers was dubbed “too big” to undergo what action?

ANSWER: **failure** [or word forms of **failing**; accept **fallible** or **fallibility**; accept **bankruptcy** or financial **insolvency** or **insolvent**; accept product **failure**, business **failure**, “too big to **fail**,” or Museum of **Failure**; prompt on **losses**, **mistakes**, **errors**, **problems**, **defects**, or **disasters** by asking “resulting in what action?”; reject “risk-taking”]

<Other Academic>

8. This critic uses the dignity that Neoptolemus affords Philoctetes to explain how in Sophocles, “malodorous disease” can make a man the “master of a superhuman art.” This critic argued that *Finnegans Wake* could be read as depicting a night’s sleep, just as *Ulysses* tracks a single day, in his essay “The Dream of H. C. Earwicker” from the book *The Wound and the Bow*. A 1965 letter to the *NYRB* ridiculed this critic for “garbling every second word” when he was challenged to read a poem aloud. This critic discussed *Brokenburn: The Journal of Kate Stone* and the diary of Mary Chesnut in a book that takes its title from James Ryder Randall’s “Maryland, My Maryland.” This critic, who feuded with Vladimir Nabokov over a translation of *Eugene Onegin*, wrote a book-length study of symbolist literature. For 10 points, name this author of *Patriotic Gore* and *Axel’s Castle*.

ANSWER: Edmund **Wilson** [or Edmund **Wilson**, Jr.]

<American Literature>

9. Henri Gamache (“on-REE ga-MAHSH”) systematized folk religious practices from this country in *The Master Book of Candle-Burning*. Albert Raboteau described “invisible institutions” of this country’s religion, like “hush harbors.” “Two-handed” workers from this country could both cure and cause “crossed” conditions. A charm produced in this country must be “fed” by pouring holy water or whiskey onto it. In a folk tradition in this country, blue bottles are hung from trees to ward off “haints.” This is the most populous country where clandestine religious rituals featured “ring shouts,” and the southernmost country where marriage bans were symbolically avoided by “jumping the broom.” “Mojo hands” exemplify this country’s conjure charms. For 10 points, name this home country of Marie Laveau, who practiced its offshoot of Vodou in the French Quarter.

ANSWER: **United States** [or **United States** of America; or **USA**; accept **Confederate** States of America or **Confederacy** or **CSA**; prompt on **America**]

<Religion>

10. A holder of this title who was accused of corrupting the title of “grand sovereign” was deposed in part by an itinerant indulgence-seller named Paisios Ligarides. A holder of this title named Daniel studied under the leader of the Josephites and cast “Non-Possessors” like Maximus the Greek as heretical “Judaizers.” This was the highest title of a noble who was freed from Sigismund III Vasa’s imprisonment in the Truce of Deulino. The *Stoglav* was banned at an event held to depose a holder of this title with aid from Symeon of Polotsk. A holder of this title commissioned the revisionist *Book of Royal Decrees* that popularized the idea of his city as a “Third Rome.” The regent for Michael I Romanov attained this title after Boris Godunov’s murder, taking the name Filaret. For 10 points, name this highest position in the Russian Orthodox Church.

ANSWER: **Patriarch** of **Moscow** [or **Metropolitan** of **Moscow**, **Patriarch** of **Moscow** and all Rus’, **Patriarch** of **Moscow** and all Russia, **Patriarch Moskovskij** i vseja Rus, or **Metropolitan** of **Moscow** and all Rus’; accept **Moskva** in place of “Moscow”; prompt on **patriarch** or **metropolitan**]

<European History>

11. *Specific term required.* Tarleton Gillespie analyzed how discourses of these things position businesses as egalitarian. Nick Montfort and Ian Bogost founded a school of videogame studies named for these things in *Racing the Beam*. Yanis Varoufakis wrote that these things look like markets, but are really “fiefdoms,” in *Technofeudalism*. The “decay” of these specific things is synonymous with Cory Doctorow’s idea of “enshittification.” Types of these things that enable “integration” and “innovation” contrast with their transactional “matchmakers,” which enable the two-sided markets of their namesake “economy.” The idea of the network as one of these things defines Web 2.0. These things name a boycott method that bans user accounts or disinvites campus speakers. For 10 points, what vehicles of online infrastructure enable mass communication?

ANSWER: digital **platforms** [accept **deplatforming** or **no-platforming** or word forms; accept **platform** economy, transaction **platforms**, innovation **platforms**, integration **platforms**, digital trading **platforms**, **platform** decay, or **platform** studies; prompt on **intermediary** or **intermediaries**; prompt on online **services** or **service-providers**; prompt on **websites**]

<Social Science>

12. Amines like DMAP (“D-map”) or DABCO (“dab-co”) are added to this position to prepare the reactive intermediate of the Baylis–Hillman reaction, which forms a bond one carbon away. The ability of a silyl (“SYE-lil”) methyl group in this position to undergo hyperconjugation drives the Sakurai reaction. Conjugate additions proceed by attacking a carbon at this position because they are vinylogous (“vye-NILL-uh-guss”) to a 1,2-addition. This letter describes the relative position of the positive charge on an alkene activated by an EWG. The carbon on a Michael acceptor that undergoes nucleophilic attack is denoted by this letter and marks the furthest point of unsaturation. This letter describes the position of the ketone relative to the ester in the product of the Claisen (“KLY-zen”) condensation. For 10 points, give this Greek letter that describes a relative position two carbons away from a functional group.

ANSWER: **beta** position [accept **beta**-ketoester; accept **beta**-silicon effect; prompt on the 3 or 4 position by asking “what letter describes that relative position?”]

<Chemistry>

13. At an annual festival limited to 50 attendees, musicians from this religious tradition play instruments like the *lira* and *gimbri*. At Glastonbury 2023, the first artist on the Pyramid Stage was a collective from this religious tradition called the Master Musicians of Joujouka (“joo-JOO-kah”). A musician from this religious tradition released a 1988 album on Real World whose title means “King of Kings,” a nickname he earned for abilities like very rapid performance of *sargam*. Musicians from this religious tradition who appeared on Peter Gabriel’s soundtrack for *The Last Temptation of Christ* include the *ney* player Kudsi Ergüner and the virtuoso behind the album *Mustt Mustt*. This religious tradition’s devotional singers include Nusrat Fateh Ali Khan, a *qawwali* performer. For 10 points, name this tradition whose music often accompanies meditative “whirling.”

ANSWER: **Sufism** [or **Sūfiyya**; or **Taşawwuf**; accept **Mevlevi** order; prompt on **Muslim** or **Islam**; prompt on **Jebala**]

<Other Fine Arts>

14. A character with this name titles a novel with a chapter that, in its entirety, asks, “What do you think?” That Gilbert Adair novel is titled for this name and a “needle’s eye.” In a Lewis Padgett story, a person implied to have this first name asks an author to publish a “wordless little song” that, a century later, reveals an equation used by the Paradine (“para-deen”) children to transcend spacetime. The meeting of Peter Llewelyn Davies and an 80-year-old woman with this first name at a bookshop is explored in a play by John Logan. The first lines of the acrostic poem “A Boat Beneath a Sunny Sky” spell this name, suggesting that a person with middle name “Pleasance” inspired a character who recites the poem “How Doth the Little Crocodile” and is asked why a raven is like a writing desk at a tea party. For 10 points, give this name of Lewis Carroll’s best-known heroine.

ANSWER: **Alice** [accept **Alice** Liddell or **Alice** Pleasance Liddell or **Alice** Pleasance Hargreaves; accept *Peter and Alice*; accept *Alice Through the Needle’s Eye*] (The Lewis Padgett story is “Mimsy Were the Borogoves.”)

<British Literature>

15. John Martin discovered that metals in O-rings were poisoning these organisms, causing systematic errors in measurements of them taken with Einer Steeman Nielsen’s radioactive decay-based method. Although no longer used, another method of studying these organisms estimated their distribution from color data obtained by the CZCS radiometer. These organisms may be less abundant than expected in HNLC regions due to a lack of iron. These organisms’ dimethylsulfide (“di-methyl-sulfide”) emissions are a key component of the planetary scale feedback mechanism known as the CLAW hypothesis. The particulate organic carbon formed by these organisms serves as the foundation for the biological pump. Diatoms (“DY-uh-toms”) and cyanobacteria are part of this group of organisms that primarily live in the euphotic (“yoo-FOH-tick”) zone. For 10 points, name these microscopic marine autotrophs.

ANSWER: **phytoplankton** [accept **phytoplankters**; prompt on **plankton**, **plankters**, **microplankton**, **nanoplankton**, **picoplankton**, marine **plankton**, or freshwater **plankton**; reject “zooplankton”] (The first sentence refers to Einer Steeman Nielsen’s carbon-14-based method for measuring phytoplankton primary productivity.)

<Other Science>

16. A paper by this thinker introduces the “interpersonal test,” which a policy passes if any member of a “justificatory community” could defend it to any other member, to argue against the “incentive argument.” This thinker defended the compensation of unchosen “expensive tastes” in “On the Currency of Egalitarian Justice.” Jason Brennan imagined a meta-utopian Mickey Mouse Clubhouse Village in response to this thinker’s “camping trip” thought experiment. This author explicated the “primacy thesis” and analyzed the “fettering” of productive forces by obsolete relations of production in a 1978 book-length defense of historical materialism. This author of *Why Not Socialism?* founded a school of thought that includes Erik Olin Wright, Jon Elser, and John Roemer. For 10 points, name this author of *Karl Marx’s Theory of History*, a pioneering analytical Marxist.

ANSWER: G. A. **Cohen** [or Gerald Allan **Cohen**; or Gerry **Cohen**]

<Philosophy>

17. *Note to moderator: Read the answerline carefully.* Women broke one of these objects made with blood by Notsé’s tyrant Agokoli and began the Ewe migrations. Gan gold miners may have created these objects at Loropéni. The Armenian vizier Badr al-Jamali replaced these objects in Fatimid Cairo. The *Song of Bagauda* explains Kano’s “ancient” set of these objects, which were credited to Queen Amina in Zaria. Palm oil lamps lit these objects in a huge system credited to Ewuare in Benin. Chevrons decorate the Khami style of these structures from Butua’s Torwa dynasty, which had precursors at Mapungubwe and a site where Gertude Caton Thompson proved their local origin. These structures surrounded the medieval Hill Complex near the two parallel sets of them at the 10-meter-high Great Enclosure. For 10 points, soapstone birds topped what structures built with mortarless drystone at Great Zimbabwe?

ANSWER: **walls** [accept **gates**, **barriers**, **defenses**, **moats**, **ramparts**, **bastions**, **bulwarks**, **turrets**, **stockades**, or **palisades**; accept **enclosures** until read; prompt on **buildings**, **masonry**, **earthworks**, **fortresses**, **fortifications**, **towers**, **ruins**, or **kraals** by asking “what specific components?”; prompt on **rocks**, **stones**, **mudbricks**, **granite**, or **laterite** by asking “used to construct what objects?”]

<World History>

18. This composer’s oboe concerto begins with a “D, E, D, E” cello figure that is echoed by the “B-flat, C, B-flat, C” cello figure that begins the next movement. A fairy tale inspired one of this composer’s very last pieces, an F-major “duet-concertino” for clarinet, bassoon, and strings. This composer reluctantly partnered with Joseph Gregor for the opera *Friedenstag* (“FREE-dens-tahk”) on the advice of Stefan Zweig (“ts’vyke”), with whom this composer wrote the ill-fated opera *Die schweigsame Frau* (“dee SHVYKE-zah-muh FRAO”). This composer asked if he or Mozart consciously wrote Aryan music in an intercepted letter that led to his dismissal from the Reichsmusikkammer (“rykes-moo-zeek-KAHM-mer”). The day after the Vienna Opera House was bombed, this composer began writing *Metamorphosen*. For 10 points, name this composer who introduced himself to occupying Allied soldiers as “the composer of *Salome* and *Der Rosenkavalier*.”

ANSWER: **Richard Strauss** [or **Richard Georg Strauss**; prompt on **Strauss**]

<Classical Music>

19. An archaeological culture named for this person built Baker Village and drew Nine Mile Canyon's pictographs after the Desert Archaic culture. Steve Inskeep's book *Imperfect Union* recounts how this person married "quite a female politician," who wrote bestsellers like *A Year of American Travel* and lobbied John Greenleaf Whittier to support this man with his Hungarian wartime bodyguard, Charles Zagonyi. Solomon Nunes Carvalho took daguerrotypes for this man, who names a cottonwood that marked water sources on the Old Spanish Trail. This commander of the Western Department married Thomas Hart Benton's daughter Jessie, lost his funds from Rancho Las Mariposas as the absentee governor of the Arizona Territory, and briefly emancipated Missouri in 1861. For 10 points, Kit Carson guided what "Pathfinder," who ran as a Republican in 1856?

ANSWER: John C. **Frémont** [or John Charles **Frémont**; accept **Frémont**'s cottonwood or *Populus fremontii*; accept **Fremont** culture]

<American History>

20. This book's warning that a girl who is not married young will give herself "to whom she will" provides the title of a debut novel about a rich girl's marriage to a poor radio station worker. After learning of this book while searching for a death-reversing elixir made of mountain herbs, Borzuya translated it into Pahlavi for Khosrow. In its frame story, this book is written to educate the "supreme ignoramuses" Rich-Power, Fierce-Power, and Endless-Power. After her husband wanders off to beg for rice-gruel, a woman in this book uses a water jug to kill the "faithful mongoose" who saved her baby from a snake. This book's Arabic adaptation, *Kalīla wa-Dimna*, is named for two jackal ministers of a lion king. For 10 points, the Jātaka Tales are one of the sources of what ancient Indian collection of animal fables named for its five books?

ANSWER: **Panchatantra** [or **Pañcatantra** or **Pañcatantram**; prompt on **Five Treatises**] (The debut novel is *Amrita, Or, To Whom She Will* by Ruth Praver Jhabvala.)

<World Literature>

BONUSES

1. Excess infiltration and inflow, or I&I, into these systems can cause overflow events called SSOs. For 10 points each:

[10e] Name these systems whose trunk lines convey blackwater to interceptor lines, which are directly connected to treatment plants.

ANSWER: **sewage** systems [accept **sewage** lines or **sewage** pipes; accept **sewer** or **sewerage** in place of “sewage”; accept **sanitary** sewage systems; prompt on **wastewater** systems or **drainage** systems or public **water** systems; reject “storm drains,” “storm sewage systems,” “septic tanks,” or “septic systems”] (SSO stands for sanitary sewer overflow.)

[10m] Using this equation, the head loss of flow in a sewage system can be calculated as: [read slowly] the friction factor, times pipe length over hydraulic diameter, times one-half fluid density times velocity squared.

ANSWER: **Darcy**–Weisbach equation [reject “Darcy’s law”]

[10h] Damaged sewage pipes can be repaired by relining them with this type of concrete that is pneumatically applied to surfaces at high velocities.

ANSWER: **shotcrete**

<Other Science>

2. A poet of this era named a literary society for the town of Arzamas after his “archaist” opponents wrote of him drunkenly raving at an inn there. For 10 points each:

[10e] Name this era of Russian poetry bookended by Vasily Zhukovsky and Mikhail Lermontov. The later era of Alexander Blok and Anna Akhmatova was named in contrast to this era.

ANSWER: **Golden Age** [or **Golden Age** of Russian Poetry or **Zolotoy** vek russkoy poezii; prompt on the Age of **Pushkin** or Poety **pushkinskoy** pory or similar answers]

[10h] The Arzamasians attacked the Golden Age’s precursors, like this poet who defended singing of “mighty men” in “Conversations Between Me and the Women.” A later author from this poet’s family wrote the anti-Bolshevik diary *Cursed Days*.

ANSWER: Anna **Bunina** [or Anna Petrovna **Bunina**] (The 20th-century author is Ivan Bunin.)

[10m] At an inn in Arzamas, this later person had a crisis that Maxim Gorky called the “Arzamas horror.” Gorky compared God and this owner of the estate Yasnaya Polyana to “two bears in one den.”

ANSWER: Leo **Tolstoy** [or Lev Nikolayevich **Tolstoy**]

<European Literature>

3. Answer the following about failed religious predictions from around the world, for 10 points each.

[10e] The founder of Taiwan’s Chen Tao offered to crucify himself when one of these things did not appear. The Nation of Islam predicted one called “Mother Plane” and Heaven’s Gate anticipated one disguised as Hale–Bopp.

ANSWER: **UFOs** [or **unidentified flying objects**; or **UAPs** or **unidentified anomalous phenomena**; or **spaceships** or equivalents; prompt on **comets**]

[10m] In the 1983 Hawkes Bay case, Naseem Fatima’s predictions that Indian Shi’ites could walk to Baṣra, Karbālā, and this Iraqi city led to mass drowning. Most *marja’ al-taqlīd* live in Qom or this city, where ‘Alī was buried.

ANSWER: **Najaf** [or al-**Najaf** al-Ashraf; accept **Wādī al-Salām** or **Valley of Peace**]

[10h] After the Great Disappointment, Ellen White created this Seventh-Day Adventist doctrine, which holds that 1844 was the date when God began the final process of deciding which souls reach “heavenly sanctuary.”

ANSWER: **investigative judgment**

<Religion>

4. In *The Painted Word*, Tom Wolfe mockingly describes this artist looking for “ultramicroscopic wisps of cotton fray” after creating paintings like *Third Element*. For 10 points each:

[10h] Name this artist whose technique caused him to die of lung cancer at age 49. He used Magna acrylic for paintings like the *Veils* series.

ANSWER: Morris **Louis**

[10m] Wolfe lampoons the churn of New York artistic taste by mentioning how paintings from this movement were copied by 7th Avenue dressmakers. This movement’s debut MoMA exhibit in 1965 featured paintings by Victor Vasarely.

ANSWER: **op** art [or **optical** art] (The exhibit was *The Responsive Eye*.)

[10e] Wolfe laments the rise of art theory in a section titled “Le Tout New York on a Cubist” one of these animals. One of these animals screams as it is pierced by a spear in the center of *Guernica*.

ANSWER: **horses** [or **equines** or **equids**; accept **colts**, **steeds**, **stallions**, **mares**, or other types of horse]

<Painting & Sculpture>

5. *Description acceptable*. The supposedly barbarous failure to perform this task was dubbed *akratoposia* or the “Scythian fashion,” which is depicted as provoking riot in a poem by Anacreon. For 10 points each:

[10m] Identify this preliminary Greco-Roman practice that elite men generally performed in a *krater*, sometimes employing the three-to-one ratio recommended by Hesiod’s *Works and Days*.

ANSWER: **mixing** water with **wine** [or **mixing wine** with water, **diluting wine** with water, **watering down wine**, or equivalents; accept **H2O** or **hydor** in place of “water”; accept **oinos** in place of “wine”; prompt on **alcohol**, **drinks**, **beverages**, **spirits**, hard **liquor**, **booze**, **ethanol**, or ethyl **alcohol** in place of “wine”; reject “drinking” or “imbibing”]

[10e] The ritualized mixing of wine and water opened this programmatic portion of a Greek banquet, which typically followed the *deipnon*. Its name literally means “drinking together.”

ANSWER: **symposium** [or **symposion**, **symposia**, **symposiarch**, **symptic**, or **symposiasts**]

[10h] Symptic contests included *askaliasmos* on greased wineskins and this game of flicking wine lees at a balanced target. This game’s judges rewarded elegant shots with prizes like eggs or kisses from a *hetaira*.

ANSWER: **kottabos** [accept **kottabos** prize or **kottabion**]

<Other History>

6. Unlike a related model, the model named for this economist assumes that firms compete through quantity decisions rather than pricing. For 10 points each:

[10m] Name this economist championed by Léon Walras (“wall-RAHSS”). He names a model inspired by competition over spring water in which multiple firms with market power produce homogeneous goods.

ANSWER: Antoine Augustin **Cournot** [accept **Cournot** competition or **Cournot** model]

[10h] Dynamics in the Cournot model conform to this phenomenon, in which behavior is based on best-response to previous variables. This condition is central to the Ezekiel–Schultz–Ricci “cobweb theorem.”

ANSWER: **adaptive expectations** [prompt on **expectations** or **hysteresis**; reject “rational expectations”]

[10e] Cournot believed that introducing cooperation into his model would lead to this market structure. The “natural” form of this market structure can arise when high fixed costs act as a barrier to entry.

ANSWER: **monopoly** [or **monopolies**; accept natural **monopoly**; reject “monopolistic competition”]

<Social Science>

7. The presence of these enzymes in soil species of *Bacillus* marked the discovery of a process known as “QQ,” which can also be mediated by acylases and oxidoreductases. For 10 points each:

[10h] Name these enzymes that pathogenic bacteria express to quench quorum sensing by opening the ring of AHL.

ANSWER: AHL **lactonases** [or *N*-acyl homoserine **lactonases**; accept **autoinducer inactivators** or **AiiA**; prompt on **esterases** or **hydrolases**] (QQ is “quorum quenching.”)

[10m] *N*-acyl homoserine lactones were first described as autoinducers for this operon. *A. fischeri* bacteria express this operon in organs that are vented daily by Hawaiian bobtail squid, which rely on its products for bioluminescence.

ANSWER: ***lux*** operon [or **luciferase** operon; accept ***luxA*** or ***luxB***]

[10e] *A. fischeri* was reclassified out of the genus *Vibrio* using phylogenetic methods pioneered by Carl Woese (“woes”), who identified this domain as separate from eukaryotes and bacteria.

ANSWER: **Archaea** [accept **Archaeobacteria** or **archaeobacteria**]

<Biology>

8. In Chisholm’s paradox, a system named for this word faces a contradiction from four statements about helping one’s neighbor. For 10 points each:

[10m] Give any form of this Greek word that names a branch of modal logic with O and P operators in G. H. von Wright’s version. An ethical theory named for this word theorizes inflexible “perfect duties.”

ANSWER: **deon** [or **deontos**; accept **deontic** or **deontology** or word forms; accept **deontological** ethics; accept **deontic** logic]

[10e] Alf Ross’s paradox for deontic logic deals with the introduction of this connective, which appears to be misused when linking deontic modals in “free choice inferences.” This logical operator is shaped like a “V.”

ANSWER: **disjunction** [or logical **or**; or logical **addition**; or logical **union**; reject “exclusive or” or “exclusive disjunction”]

[10h] This maxim can be rendered in deontic logic as “O, A, arrow, diamond, A.” Give the English name for this principle attributed to Kant, under which the existence of moral law requires human freedom.

ANSWER: **“ought implies can”** [or **OIC** principle]

<Philosophy>

9. Answer the following about Latin American literature inspired by Hieronymus Bosch, for 10 points each.

[10e] Augusto Roa Bastos claimed *The Garden of Earthly Delights* as an inspiration for his novel in this genre, *Yo el supremo*. *The Feast of the Goat* is in this genre that depicts tyranny.

ANSWER: **dictator** novel [or **dictatorship** novel or novela de **dictadura**; or novela del **dictador**]

[10m] The title Bosch painting and the Tapestry of Creation were reference points for a novel from this country, Cristina Peri Rossi’s *The Ship of Fools*. An aphorism holds that this country produces “strange” authors, like Juana de América and Juan Carlos Onetti.

ANSWER: **Uruguay** [or Oriental Republic of **Uruguay**; or República Oriental del **Uruguay**]

[10h] *The Garden of Earthly Delights* appears in a mirror in El Señor’s palace in this novel, symbolizing its three-part structure. Hundreds of women give birth along the Seine (“sen”) in this massive novel’s section “The Old World.”

ANSWER: ***Terra Nostra*** (by Carlos Fuentes)

<World Literature>

10. A law regulating railroad rates in this state forced the *Ex parte Young* decision. For 10 points each:

[10e] Name this home state of National Grange founder Oliver Hudson Kelley. Its Democratic–Farmer–Labor Party was formed by Hubert Humphrey.

ANSWER: **Minnesota** [or **MN**]

[10m] Frank H. Peavey and Charles F. Haglin designed a cylindrical concrete type of this device in Minnesota. State regulation of a private company’s rates to use these devices led to the case *Munn v. Illinois*.

ANSWER: **grain elevator** [prompt on **elevators**; prompt on grain **silos**]

[10h] The Grange lobbied for the creation of the Interstate Commerce Commission, which was necessitated by a court case colloquially given this name. A town with this name claims to be the first town entirely lit up by electric streetlights after Charles F. Brush tested them in Cleveland.

ANSWER: **Wabash** [accept **Wabash** Case or **Wabash, St. Louis & Pacific Railway Company v. Illinois**]

<American History>

11. This term is a common translation for the *adjá-adjá* pursued by migrants from Equatorial Guinea in Europe. For 10 points each:

[10e] What term names a loan program created by Kenyan president William Ruto? This slang term for striving at work is prefixed by “side” for second jobs in the gig economy.

ANSWER: **hustle** [or word forms of **hustling** or **hustlers**; accept side **hustles**; accept **Hustler** Fund or “**Hustler-in-Chief**”]

[10h] Nigeria’s pervasive hustle culture is repudiated by this two-word idiom similar to “self-care.” This phrase was ironically coined for the stress-free lifestyle pursued by “blessees” who date South African sugar daddies.

ANSWER: **soft life** [accept **soft girls**]

[10m] A more overt anti-work trend is “lying flat” to resist overwork from this Chinese schedule named for three numbers. This system led to “involution” from burnout, or *nèijuǎn* (“NAY-joo-en”), in parallel to the “Great Resignation.”

ANSWER: **9-9-6** [or **9-9-6** work schedule; or **996**; or **jiǔ-jiǔ-liù** gōngzuò zhì]

<Current Events>

12. *Original-language term required.* Secessionists identified the Morning Star flag with this word, which codenamed a failed invasion of Sabah that launched the Moro rebellion. For 10 points each:

[10h] What term for “independence” derives from Indian freedmen? The Gambir Palace and Koningsplein were renamed for this word, which was yelled at its namesake stadium in 1957 to install an elected king.

ANSWER: **merdeka** (“mer-DECK-ah”) [or **maradeka**, **mardika**, **maharlika**, **maharddhika**, orang **merdeka**, or **Mardijkers**; accept **Merdeka** Day, **Merdeka** Square, **Merdeka** Stadium, Hari **Merdeka**, Dataran **Merdeka**, Bapa **Kemerdekaan**, or Operation **Merdeka**] (Clues include the Free Papua Movement and Tunku Abdul Rahman shouting “merdeka” for Malaysia’s Yang di-Pertuan Agong.)

[10e] In 1952, Colonel Nasution occupied Merdeka (“mer-DECK-ah”) Palace to suspend this system. In 1957, Sukarno declared a “guided” version of this system to check the regional rebellions of the liberal period.

ANSWER: **democracy** [or word forms of **democratic**; accept liberal **democracy** or parliamentary **democracy** or **Demokrasi** Liberal; accept guided **democracy** or **Demokrasi** Terpimpin] (Nasution surrounded the palace in the 17 October affair.)

[10m] Ibrahim Nasir won this country’s independence from Britain, then formed an undemocratic People’s Majlis (“MAJ-leese”). The United Suvadive Republic seceded from this country, which reelected, then re-abolished, its Dhivehi sultanate.

ANSWER: **Maldives** [or Republic of **Maldives**; accept **Maldiv**e Islands or Sultanate of **Maldives**]

<World History>

13. This metal and copper are both used as matrices in superconducting cables. For 10 points each:

[10e] Overhead power cables are usually made from what metal due to its lightness? It is the second-most mined metal in the world after iron.

ANSWER: **aluminum** [or **aluminium** or **Al**]

[10m] The matrix in superconducting cables maintains conduction even if a process of this name occurs and the superconductor ceases to be superconducting. Another process of this name causes the austenite–martensite transition.

ANSWER: **quenching**

[10h] A 2018 article by Kováč (“ko-VATCH”) et al. proposed making superconducting wires in which an aluminum sheath surrounds this very light superconductor. At 39 kelvins, it has the highest critical temperature of any conventional superconductor.

ANSWER: **magnesium diboride** [or **MgB₂**]

<Physics>

14. This composer’s Second String Quartet has an intensely lyrical third-movement “Notturmo” led by a very high-pitched cello part. For 10 points each:

[10e] Name this chemist who moonlighted as the composer of pieces like *In the Steppes of Central Asia*.

ANSWER: Alexander **Borodin** [or Aleksandr Porfirievich **Borodin**]

[10m] Borodin’s First String Quartet is based on material from this late Beethoven chamber piece, from which the *Grosse Fuge* was extracted and independently published.

ANSWER: **String Quartet No. 13** [or **String Quartet No. 13** in B-flat major, Op. 130; or Beethoven’s **Opus 130**; prompt on String Quartet in B-flat major]

[10h] This unfinished orchestral piece by Borodin in A minor has only two movements: a sketch of a first movement and a 5/8-time scherzo. Glazunov’s completion of this piece adds two movements and a full orchestration.

ANSWER: **Symphony No. 3** in A minor [or Borodin’s **Third Symphony**]

<Classical Music>

15. A “user’s guide” to this condition by Mary Ann Lund examines a 17th-century text that distinguishes a “heroic” subtype due to love. For 10 points each:

[10m] Name this “inbred malady” that titles a digressive encyclopedia by Robert Burton. A collection of ballads by Thomas D’Urfey is titled for “pills to purge” this condition.

ANSWER: **melancholy** [or **melancholia** or **melancholic**; accept *The Anatomy of Melancholy* or Burton’s *Melancholy*; accept *Wit and Mirth, or Pills to Purge Melancholy*; accept *A User’s Guide to Melancholy*]

[10e] Inspired by *The Anatomy of Melancholy*, Northrop Frye’s *Anatomy of Criticism* suggested using the name “anatomy” for the Menippean form of this genre perfected by Juvenal.

ANSWER: **satires** [or **satirae**; accept Menippean **satires** or **satirae** Menippeae]

[10h] The Juvenal translator William Gifford satirized these sentimental poets for writing “a melancholy poem on the death of a bug” in the *Baviad*. This 18th-century school of poets is named for a Florentine “academy of the bran.”

ANSWER: Della **Cruscans** [accept Accademia della **Crusca** or La **Crusca**]

<British Literature>

16. A documentary about these devices analyzes Alphonse Bertillon's anthropometrics with the theory of Jonathan Crary and Forensic Architecture. For 10 points each:

[10h] Name these devices analyzed in Theo Anthony's documentary *All Light, Everywhere*. One of these devices was displayed on a Los Angeles billboard in Mark Bradford's piece *Life Size*.

ANSWER: **bodycams** [or **body cameras**; or **wearable cameras** or equivalent descriptions; prompt on cameras]

[10e] Like *All Light, Everywhere*, a 2020 Arthur Jafa artwork of this type contrasts the Sun's convection with police footage. Jacques-Louis David paintings appear in a work of this type set at the Louvre titled "Apeshit."

ANSWER: **music videos** [prompt on videos or video art; reject "songs"]

[10m] Mounted police perform crowd control in a piece by an artist from this country on the cover of Claire Bishop's book *Artificial Hells*. An artist who was born in this country created the "earth-body" *Silueta* series.

ANSWER: **Cuba** [or Republic of **Cuba**; or República de **Cuba**] (The artists are Tania Bruguera and Ana Mendieta.)
<Other Fine Arts>

17. Aryl derivatives of this compound must be "clamped" with crosslinks to not dissociate. For 10 points each:

[10m] Name this smallest alkane with an eclipsed conformer. This alkane's hexaaryl ("hexa-aryl") derivative is too unstable to be the dimer of the trityl radical.

ANSWER: **ethane** [accept hexaarylethane or hexaphenylethane]

[10e] Because this force outpaces steric repulsion, hexaphenylethane ("hexa-phenyl-ethane") is shortened by all-*meta tert*-butyl substitution. This van der Waals force involves interactions between instantaneous dipoles.

ANSWER: London **dispersion** forces [or **London** forces]

[10h] The bridgehead carbons of these polycyclic compounds are spanned by a weak "ethane" bond and distort into inverse tetrahedra in strained examples. The smallest of these compounds polymerizes into staffane and has almost no electron density in its central bond, lending evidence for charge-shift bonding.

ANSWER: **propellanes** [accept 1.1.1 **propellane**]

<Chemistry>

18. Transformation masks in this province recall stories of the "people of myth" differentiating into humans, animals, and Dzunukwa spirit-beings. For 10 points each:

[10e] Name his province where Franz Boas recorded contradictory myths from Kwakiutl clans named for Raven, Killer Whale, Eagle, and Wolf, characters who appear in its sculpture *The Spirit of Haida Gwaii*.

ANSWER: **British Columbia** [or **BC**] (Bill Reid sculpted *The Spirit of Haida Gwaii*.)

[10h] In a British Columbian motif, this enemy of Wolf scorches the world with his father's sun disk like Phaethon. Boas heard tales of this Kwakiutl culture hero marrying Kelp and warring with Otter.

ANSWER: **mink** [or American **mink**; accept **Born-to-be-the-Sun** or **T̓lisalagi'lakw**; prompt on mustelids or New World weasels]

[10m] The mink fails to retrieve land in many "earth-diver" myths, which feature this tree killing a serpent among the Yuchi. Coastal peoples carve transformation masks and totem poles from this "tree of life."

ANSWER: **cedar** [accept western red **cedar** or giant **cedar** or Pacific red **cedar**; accept eastern red **cedar** or red **juniper** or eastern **juniper**; prompt on conifers, coniferous trees, evergreens, or arborvitae]

<Mythology>

19. Henry V relocated most public executions from the Elms in this district to the gallows at Tyburn. For 10 points each:

[10h] Name this area of London where William Wallace was put to death. After Richard II met revolting peasants in Mile End, London mayor William Walworth killed Wat Tyler in this other district.

ANSWER: **Smithfield**

[10e] Near Smithfield, a street named for this industry houses London's oldest residential buildings. Huguenots who took refuge in Spitalfields worked in this industry, eventually incorporating the flying shuttle and the spinning jenny.

ANSWER: **cloth** [or **textiles** or **fabric**; accept **weaving**; accept **silk**; accept **cotton**; accept **wool**; accept 41–42

Cloth Fair]

[10m] Between Smithfield and Spitalfields is Bunhill Fields, which was first used as one of these sites. Highgate and Nunhead are part of the “magnificent seven” of these sites in London once frequented by “sack 'em up men.”

ANSWER: **burial** grounds [or **cemetery**, **cemeteries**, **graveyards**, or **gravesites**]

<European History>

20. Charles Marsden tells this character, “Pippa is certainly a pippin this morning!” when she quotes Browning's lines “God's in his heaven, all's right with the world.” For 10 points each:

[10m] Name this woman who teases Marsden for being “ghostless and womanless,” but marries him years later. She is the protagonist of *Strange Interlude*.

ANSWER: **Nina** Leeds [or Nina **Leeds**]

[10h] At the end of the play, Nina watches this object before saying that “our lives are merely strange dark interludes in the electrical display of God the Father.” While watching this object, Nina tells her son Gordon to be happy.

ANSWER: Gordon's **plane** [or **airplane**, **aircraft**, **aeroplane**, or equivalents; prompt on **sky** by asking “what object in the sky?”]

[10e] *Strange Interlude* is by this American playwright, who wrote about the Mannon family in his retelling of the *Oresteia*, *Mourning Becomes Electra*.

ANSWER: Eugene **O'Neill** [or Eugene Gladstone **O'Neill**]

<American Literature>