

1. Moore and Penrose developed a formula for a generalized one of these applicable complex matrices. In multi-variable calculus, one of these can be found for a vector-valued function if its Jacobian is not zero. In logic, the one of these corresponding to a given statement is the converse its contrapositive. In single-variable calculus, the derivative of this map can be shown by the chain rule to be one over the derivative of its associated function. In order for a function to possess one of these, it must be bijective, or both onto and one-to-one, as this maps a function's range onto its domain. For 10 points, give this type of object that, when combined with its associated object, returns the identity element.

ANSWER: **inverses** (accept **pseudoinverses**)

064-09-12-07102

2. Before this battle, one side had captured Norham, Etal and Ford Castles causing another side to make their approach via Twizel Bridge. Archers arriving through Crookham Dene provided supporting action during one part of this battle. One side in this battle had honored their Auld Alliance with France's Louis XII as the opposing side was allied with Spain and the Papal States in the War of the League of Cambrai. Sometimes known as the Battle of Braxton, one side in this battle was led by Thomas Howard, Earl of Surrey while another side saw the death of their leader James IV. For 10 points, name this decisive 1513 English victory over the Scots.

ANSWER: Battle of **Flodden** Field

064-09-12-07103

3. Robert Duncan wrote a poem that begins by quoting this author's line "The light foot hears you, and the brightness begins." Thomas Gray used a poetic form named for this author to write "The Progress of Poesy." This author wrote a poem praising Athens as "violet-crowned" and the "bulwark of Greece." This author of a hymn to the god Ammon called mankind "the dream of a shadow" a poem collected in his four books of epinikia. This author celebrated the triumph of Hippocleas in the earliest of his *Pythian Odes*. For 10 points, name this Greek lyric poet of victory odes for athletes in contests such as the Olympic games.

ANSWER: **Pindar**

004-09-12-07104

4. In transaminases that use PLP as a cofactor, the amine attacks one of these functional groups before being transferred to the product. A common substrate analogue in enzyme inhibition replaces the C-terminus with one of these functional groups. Hydration of these compounds produces hemiacetals, and they produce a chemical shift from 9.5 to 10.5 ppm on proton NMR. Reacting these compounds with ammoniacal silver nitrate produces a silver mirror in the Tollens test. The simplest member of this group is often used as a preservative, and this functional group features a carbon atom double bonded to an oxygen atom and single bonded to an atom of hydrogen. For 10 points, name this functional group that is similar to a ketone.

ANSWER: **aldehydes**

002-09-12-07105

5. This action was made easier because George Foster focused suspicion on James Parker, a black waiter standing next to this event's perpetrator. This event was inspired by the similar action of Gaetano Bresci the previous year. In the immediate aftermath of this event, the perpetrator claimed to be named Fred Nobody and stated "I didn't believe one man should have so much service, and another man have none." It occurred at the Pan American Exposition in Buffalo, where a man in a receiving line hid a gun under a bandage. For 10 points, identify this action perpetrated by Leon Czolgosz, after which Theodore Roosevelt succeeded to the Presidency.

ANSWER: the **assassination** of William **McKinley**

019-09-12-07106

6. Nineteenth century revolutionaries were fond of quoting this poem's line "Hereditary bondsmen! know ye not / Who would be free, themselves must strike the blow?" The speaker of this poem observes "There is a pleasure in the pathless woods / There is a rapture on the lonely shore" before apostrophizing "roll on, thou deep and dark blue ocean -- roll!" Its fourth canto opens with the lines "I stood in Venice on the Bridge of Sighs / A palace and a prison on each hand." When this poem's first two cantos were published in 1812, its title character became known as its author's prototypical brooding, romantic hero. For 10 points, name this four-canto poem about a disaffected young man's tour of Spain, Greece, Asia Minor, and Italy, which won immediate fame for its author, Lord Byron.

ANSWER: ***Childe Harold's Pilgrimage: A Romaunt***

004-09-12-07107

7. Paul Krugman developed a model of this type of market to explain international trade driven by economies of scale. Edward Chamberlain pioneered the theory of this type of market, whose individual firms have imperfect, but extremely elastic, long-run demand curves. In this kind of market structure, in which new firms have few barriers to entry, and each firm has only a small amount of market power. In this type of market, a large number of firms coexist by using advertising to differentiate their products, which have no significant non-price differences. For 10 points, name this type of imperfect competition in which a large number of buyers purchase similar products from a large number of sellers, who can in the short run behave like monopolies.

ANSWER: **monopolistic competition** [prompt on **imperfect competition** before mentioned]

004-09-12-07108

8. This author described a person whose "malady of sacrilegious mirth / spread gay contagion with each clever breath" in a poem which tells the title character to "play the straight man for a term / And tolerate the humor of the worm." This author wrote about a newborn baby whose "clear vowels rise like balloons" in a poem beginning "Love set you going like a fat gold watch." This author of "Dirge for a Joker" and "Morning Song" wrote a poem whose speaker warns "Herr God" and "Herr Lucifer" to "Beware / Beware" because the speaker will rise "out of the ash" with her "red hair" and "eat men like air." This poet wrote "Every woman adores a Fascist" in a poem whose speaker imagines a stake in the "fat black heart" of the title character, who may be this poet's husband Ted Hughes. For 10 points, name this author of the poems "Lady Lazarus" and "Daddy."

ANSWER: Sylvia **Plath**

022-09-12-07109

9. In most schools of thought, this practice is invalidated if a person's clothing contains a spot of blood larger than a dirham coin. One type of this practice consists of a person bending over and grasping his knees with open palms, and this practice is preceded by raising hands to a person's ears or shoulders during takbir. Worshipers perform ruku and sujud during this practice, which is divided into types like fajr and zuhr. While performing this practice, worshipers face qibla and prostrate themselves on a mat. For 10 points, name this Pillar of Islam, the requirement that Muslims face Mecca and pray five times a day.

ANSWER: **salat** [or **salah**; or **namaz**; prompt on "praying" or equivalents]

004-09-12-07110

10. Art Blakey remembered this musician breaking dozens of glasses his band members had drank from in a segregated club, sarcastically calling them contaminated. After leaving Jay McShann's band, he used the chords from Ray Noble's "Cherokee" to write his "Ko-Ko." This musician recorded his composition "Billie's Bounce" with a group known as his "Re-Boppers." This man found his greatest commercial success by recording songs like "Summertime" on a namesake album "with strings," and composed the standards "Anthropology" and "Confirmation." For 10 points, name this jazz saxophonist whose hit "Ornithology" was a pun off his nickname "Bird."

ANSWER: Charlie **Parker Jr**

015-09-12-07111

11. Replacing residues 147 and 204 of this protein with cysteine makes it an effective sensor of a compartment's glutathione redox potential. This molecule contains a posttranslationally-formed bond between glycine-67 and serine-65 to form a five-membered ring with tyrosine-66. That structure is located inside this molecule's beta-barrel, which protects the central feature from water. It is commonly used as a reporter gene by fusing it to the gene of interest, which allows one to localize the fusion protein. Osamu Shimomura isolated it from *Aequorea victoria*, a jellyfish. For 10 points, name this protein often used in biological research that emits a certain color light when excited.

ANSWER: **green fluorescent protein** [or **GFP**]

001-09-12-07112

12. This symphony's second movement Scherzo is an unusually slow "Ländler." Its first movement Allegro begins with hemiolas, and is marked "Lebhaft." The three trombones in this symphony do not enter until its fourth movement, which was initially called "In the Character of the Accompaniment to a Solemn Ceremony," but later given the title "Feierlach." This early five-movement symphony was written after its composer moved to Dusseldorf, and contains a fourth movement celebrating Johannes von Geissel's elevation as the Archbishop of Cologne. For 10 points, name this Robert Schumann symphony, which describes life by a German river.

ANSWER: the **Rhenish** symphony [or Robert **Schumann's symphony** no. **three** in E-flat major; or **symphony** no. **three** in E-flat major after **Schumann** is mentioned]

026-09-12-07113

13. At the end of this story, a woman takes the words "You can say that again" literally, and repeats the phrase "I could tell that one was a doozy." The main character of this story is exactly seven feet tall, wears spectacles with thick wavy lenses and a red rubber ball on his nose, and first appears after tearing the door to a TV station off its hinges. Its protagonist defies the 211th, 212th, and 213th Constitutional Amendments by declaring "I am the Emperor!" and kissing the ceiling with a ballerina, until he is shot by Diana Moon Glampers, the Handicapper General. Beginning "the year was 2081, and everyone was finally equal," for 10 points, name this Kurt Vonnegut short story whose title character rebels against artificial handicaps that prevent people from being physically or mentally above average.

ANSWER: "**Harrison Bergeron**"

003-09-12-07114

14. This object was named for the horse of a figure who used it as his gallows. A figure known as High related to Gangleri that bees fed on the honeydew that fell from it. In the *Grímnismál*, this object was said to be the noblest of its kind and to "suffer more agony more than men know," as it was assaulted by four harts. At the very top of this object lay an unnamed eagle between whose eyes sat the hawk *Vedrfolnir*. Though the Norns used water from the Well of Urd to heal this object, it suffered more from the dragon *Nidhogg* and the pesky squirrel *Ratatoskr*. Home to nine worlds, for 10 points, name this world tree of Norse mythology.

ANSWER: **Yggdrasil**

004-09-12-07115

15. This man's successor was only in power for 45 minutes. He himself was overthrown during the Ten Tragic Days, a coup supported by US Ambassador Henry Lane Wilson. One document issued by this man attacked Ramon Carrol, a man originally picked to succeed his predecessor. While in power, he faced three different rebellions led by Felix Diaz, Pascual Orozco, and Bernardo Reyes. The author of the Plan of San Luis Potosi, he was attacked in the 1911 Plan of Ayala, issued by Emiliano Zapata. For 10 points, name this man who served as president of Mexico from 1911-1913 at the start of the revolution before being replaced by Victoriano Huerta.

ANSWER: Francisco **Madero**

064-09-12-07116

16. This artist painted a self-portrait under the statue of Mercury in his hectic scene of a man being grilled to death, the *Martyrdom of St. Lawrence*. This painter added a forked beard, a falling cloak that leaves genitalia partially visible, and a trident to his depiction of the winning admiral at Lepanto, *Portrait of Andrea Doria as Neptune*. He executed many images of Eleanora of Toledo during his thirty-three years as court painter to Cosimo di Medici; during that time, he created a painting as a gift from Cosimo to Francis I that depicts a figure who may be jealousy, despair, or syphilis howling in anguish and clutching his head at the left. That painting by this man also shows a white bird about to be stepped on, an old man carrying an hourglass, and two dramatic masks. For 10 points, name this Mannerist who created *Venus, Cupid, Folly, and Time*.

ANSWER: Il **Bronzino** [or Agnolo **Bronzino**; or Agniolo **Bronzino**; or Agnolo **di Cosimo** di Mariano Tori; or Agniolo **di Cosimo** di Mariano Tori]

019-09-12-07117

17. This material completely surrounds a kipuka. This substance can form agglutinated spatter and squeeze-up. Its morphology can be described as lineated, lobate, or jumbled. When its surface has angular fragments, this substance is described as block. Upward masses of this substance are called spines. One common type has a so-called ropey texture. Its composition ranges from andesitic to rhyolitic. It forms namesake domes and tubes. Underwater it can have a pillow morphology. Two broad types of it are aa [AH-AH] and pahoehoe [pah-HOH-hoy]. For 10 points, name this molten rock on the surface of the earth.

ANSWER: **lava** (do not accept or prompt on "magma")

001-09-12-07118

18. The most sparsely populated one of these twenty-two entities has a capital at Xining (SHIN-ing) and hosts a historic lake which is home to the migratory stopover Bird Island. Another of these entities is assigned control, on paper, of Quemoy and Matsu, which are under the de facto control of another government. In addition to Qinghai and Fujian, these entities include one which is coterminous with a southern island, Heinan, and cuisine namesakes such as Hunan and Sichuan. For 10 points, identify these most common administrative divisions of the world's most populous country.

ANSWER: **provinces** of **China** [accept obvious equivalents; or **sheng**]

019-09-12-07119

19. Among this leader's early initiatives were a 110 point economic policy and the abolishment of the death penalty through the Badinter Act. Forced to abandon the Savary Bill, which would have limited local funding for private schools, he did establish the RMI, which ensured a minimum level of income for those of working age who were ineligible for unemployment. In a speech at La Baule, he discussed eastern and southern winds signaling the advance of democracy in Russia and Africa. For 10 points, name this president of France who authorized the destruction of the Rainbow Warrior, noted for being a socialist.

ANSWER: Francois **Mitterand**

040-09-12-07120

20. Gilles Deleuze's 1966 study of this philosopher revived interest in this philosopher's concept of multiplicity. This philosopher argued that analysis creates false divisions between concepts, unlike intuition, which attempts to know absolute experience, in his essay *An Introduction to Metaphysics*. In that essay, this philosopher used the image of an elastic band contracted to a point and stretched out into an expanding line to explain his concept of continuous duration. In a 1907 book, this philosopher traced the development of life through a common "vital impulse." For 10 points, name this French philosopher, the author of *Creative Evolution*.

ANSWER: Henri **Bergson**

004-09-12-07121

21. In the formula for Griffith's criterion, this value is inversely proportional to the energy release rate  $G$ . The area under the curve whose slope is this quantity is the toughness. Elastomers typically have a very low value for this quantity. This value can be determined for a material by taking multiplying one plus Poisson's ratio by twice the shear modulus. Below the yield strength, this value is the ratio of stress to strain. For 10 points, name this measure of an object's stiffness, a quantity having units of pressure that is sometimes named for an English physicist.

ANSWER: **Young's** modulus [or **elastic** modulus; or modulus of **elasticity**]

023-09-12-07122

22. Bill Clark was in charge of ensuring this project was kept secret until its official announcement. The EUREKA Program was a French alternative to this project, debate over which stalled the Reykjavik Summit. James Abrahamson first led the organization created for it. This project was later restructured to produce Brilliant Pebbles. The Fletcher Report examined the feasibility of this project, which Edward Teller claimed would "challenge" the Soviet "monopoly" on anti-missile defense. For 10 points, name this Reagan-era project that attempted to use space-based anti-ballistic missile systems and was derisively nicknamed after a popular movie series.

ANSWER: **Strategic Defense Initiative** [or **SDI**; or **Star Wars** Defense System]

003-09-12-07123

23. One character in this novel decides against letting his daughter marry after witnessing a statue bleeding out of its nose and a skeleton dressed like a hermit. At one point in this novel, the main character is guided down a corridor by a portrait of his grandfather which mysteriously comes alive. Its other characters include Father Jerome, who recognizes the peasant Theodore as his son when he sees the mark of the bloody arrow on him. At this novel's conclusion, the Knight of the Gigantic Sabre is revealed to be the father of Isabella and Matilda is stabbed by her father Manfred. It opens with the death of Prince Conrad, who is crushed by a giant helmet in the title Italian fortress. For 10 points, name this Gothic novel by Horace Walpole.

ANSWER: *The **Castle of Otranto***

015-09-12-07124

1. The first known poem in this language is "Caedmon's Hymn." For 10 points each:

[10] Name this language also known as Anglo-Saxon, which was spoken from approximately 450 to 1100 CE. *Beowulf* was written in this language.

ANSWER: **Old English** [prompt on **English**]

[10] This Old English poem celebrates the heroism of Byrhtnoth [BEERT-noth] at the title 991 CE battle against the Vikings.

ANSWER: "The **Battle of Maldon**"

[10] Much like Old Norse poetry, Old English poetry features many of these metaphorical noun compounds. Examples of them include "whale-road" to describe the sea.

ANSWER: **kennings**

024-09-12-07201

2. The composer of this ballet reworked music depicting a swordfight from *The Fiery Angel* into its "Dance of the Knights." For 10 points each:

[10] Name this work, whose success caused the Kirov Ballet to commission its composer to write *Cinderella*. It is based on a Shakespeare play that was also the subject of a symphonic poem by Tchaikovsky.

ANSWER: **Romeo and Juliet**

[10] This Russian composed *Romeo and Juliet*, as well as the opera *The Love For Three Oranges* and *Peter and the Wolf*.

ANSWER: Sergei **Prokofiev**

[10] Prokofiev's ballet *The Prodigal Son* was choreographed by this Russian, who was invited by Lincoln Kirstein to come to the United States, where he founded the New York City Ballet.

ANSWER: George **Balanchine** [or Georg Melitonovitch **Balanchivadze**]

004-09-12-07202

3. You might know more than you think about quantum electrodynamical perturbation theory! For 10 points each:

[10] Powers of this constant, the electromagnetic coupling constant, are the order of magnitude for QED perturbations. This constant is equal in cgs units to the fundamental charge squared over  $h$ -bar times the speed of light, or about one over 137.

ANSWER: the **fine-structure** constant [prompt on **alpha**]

[10] QED perturbation theory can be represented by these diagrams with space and time axes. They represent particles' trajectories with straight or squiggly lines.

ANSWER: **Feynman** diagrams

[10] A vertex on a Feynman diagram at which two straight and two squiggly lines meet represents a first-order instance of either pair production or this process, which happens when matter and antimatter collide.

ANSWER: **annihilation**

064-09-12-07203

4. Answer some questions about rock formations with something in common, for 10 points each:

[10] New Hampshire is noted for this series of granite ledges on Cannon Mountain that when observed in the right way, appear to resemble a jagged profile.

ANSWER: **Old Man of the Mountain** [accept **Great Stone Face**]

[10] The Sleeping Giant landscape, which resembles a slumbering giant, is located in this state's Metacomet Ridge. This state's actual highest peak is Bear Mountain in Salisbury.

ANSWER: **Connecticut**

[10] Another Sleeping Giant landscape is located in this state. It is also known as Nounou Mountain and is located east of the towns Wailua and Kapa'aa. Native folklore says that this giant will eventually rise again.

ANSWER: **Hawaii**

052-09-12-07204

5. This wife of Amphion did not eat for nine days while her children were unburied. For 10 points each:

[10] Name this mother of Meliboea, who was spared the fate of her siblings. Robbed of thirteen of her children, this woman became nothing more than a weeping rock formation.

ANSWER: **Niobe**

[10] Niobe's father was this man, who fed his son Pelops in a feast for the Gods, who punished him by making him spend an eternity just out of the reach of fruit branches and water.

ANSWER: **Tantalus**

[10] Meliboea became deathly pale by the ordeal and took this name before marrying Neleus. Another figure with this name was the equivalent of Flora and was abducted by and married to Zephyr.

ANSWER: **Chloris**

064-09-12-07205

6. This man depicted a Napoleonic cavalry officer facing left, sword drawn, whose white horse is charging to the right. For 10 points each:

[10] Name this artist of *The Charging Chasseur* and *Epsom Derby*, who also painted ten mental patients for his friend Doctor Georget.

ANSWER: Théodore **Géricault**

[10] This Géricault painting shows shipwrecked men waving red and white rags, trying to get the attention of passing ships.

ANSWER: *The **Raft of the Medusa*** [or *Le **Radeau de la Méduse***]

[10] Along with Géricault, this painter was a leading French Romantic artist. He painted Napoleon "on Arcole Bridge" and "visiting the Pesthouse of Jaffa," as well as a portrait of Madame Pasteur.

ANSWER: Antoine-Jean **Gros**

022-09-12-07206

7. Shostakovich's first concerto for this instrument features a lengthy cadenza as its third movement. For 10 points each:

[10] Name this instrument. Another concerto written for it is in B minor and quotes its composer's song cycle about cypress trees near its end.

ANSWER: **cello**

[10] The aforementioned cello concerto was written by this composer of the American String Quartet and the opera *Rusalka*.

ANSWER: Antonín Leopold **Dvorák** [DVOR-zhahk]

[10] Dvorák's ninth symphony, which is given this nickname, features a third-movement scherzo inspired by Longfellow's *Song of Hiawatha*.

ANSWER: "From the **New World**" [or "Z **nového sveta**"]

024-09-12-07207

8. In one story from this collection, the title characters “Rinconete and Cortadillo” become students in Monipodio’s school for criminals. For 10 points each:

[10] Name this collection of stories by a Spanish author that also includes “The Illustrious Scullery Maid,” “The Jealous Estremaduran,” and “The Deceitful Marriage.”

ANSWER: **Novelas Ejemplares** [or **Exemplary Novels**]

[10] In addition to plays such as *The Siege of Numantia* and *The Cave of Salamanca*, this man wrote the *Novelas Ejemplares*. He also wrote *Don Quixote*.

ANSWER: Miguel de **Cervantes** Saavedra

[10] In *Don Quixote*, this is the name Don Quixote gave to Aldonza Lorenzo, who serves as Quixote’s ideal of womanhood. She appears in a vision at the Cave of Montesinos.

ANSWER: **Dulcinea** del Toboso

030-09-12-07208

9. Answer the following about Senator George Norris, for 10 points each.

[10] Norris sponsored the 1933 act establishing this New Deal organization, which built dams and provided power in the rural South.

ANSWER: **Tennessee Valley Authority** [or **TVA**]

[10] Norris was also the primary sponsor of this Constitutional amendment, which moved the date that presidential terms begin from March fourth to January twentieth. It also detailed the line of succession if an elected president dies before being inaugurated.

ANSWER: **20th** Amendment

[10] Norris led the revolt against the dictatorial power of this Republican Speaker of the House, who effectively controlled all debate in the House from 1903 to 1910 by serving as chairman of the Rules Committee.

ANSWER: Joseph Gurney **Cannon**

004-09-12-07209

10. With his wife, the photographer Margaret Bourke-White, he wrote the text for the photodocumentary book about the rural South called *You Have Seen Their Faces*. For 10 points each:

[10] Name this author who wrote a novel in which Will Thompson rapes Buck Walden's beautiful wife Griselda.

ANSWER: Erskine **Caldwell**

[10] This novel by Erskine Caldwell focuses on a family of poor sharecroppers whose patriarch, Jeeter Lester, ultimately burns to death in his shack.

ANSWER: **Tobacco Road**

[10] *You Have Seen Their Faces* predated the photodocumentary *Let Us Now Praise Famous Men*, a collaboration between this author and Walker Evans. He also wrote *A Death in the Family*.

ANSWER: James **Agee**

030-09-12-07210

11. Important concepts in this paradigm are polymorphism and encapsulation. For 10 points each:

[10] Name this programming paradigm often implemented with classes.

ANSWER: **object-oriented** programming [or **OOP**]

[10] This object-oriented concept refers to the ability of a derived class to use the methods and data of its parent class.

ANSWER: **inheritance**

[10] This type of inheritance allows for a method of a derived class to override that of the parent. In C++, this must be used as a keyword in the base class for such overloading to be possible.

ANSWER: **virtual**

001-09-12-07211

12. It was first delivered as a lecture to a small audience at a 1904 academic conference, in less than an hour. For 10 points each:

[10] Identify this Halford Mackinder paper, which proclaimed the end of the "Colombian Age" and influenced all subsequent military strategy by positing that "Who rules East Europe commands the Heartland/Who rules the Heartland commands the World-Island/Who rules the World-Island commands the World."

ANSWER: "The **Geographical Pivot of History**"

[10] Mackinder also wrote a series of eight lectures on the geopolitics of this country. Current geopolitical issues in this country include strife over the disputed territory of Kashmir and nuclear tensions with neighbor Pakistan.

ANSWER: Republic of **India**

[10] Another strategic theorist was this American naval officer and Naval Academy president, who wrote about "the influence of sea power" on history, on the French Revolution, and on contemporary American interests.

ANSWER: Alfred Thayer **Mahan**

019-09-12-07212

13. This device uses a tube with ninety percent argon and ten percent vapor of ethyl alcohol, which is coated with metal and has a wire running down the center of the tube. For 10 points each:

[10] Name this device that uses a rest potential of one thousand volts, which drops when beta particles enter the tube, allowing quantification of radiation.

ANSWER: **Geiger counter**

[10] Hans Geiger was a graduate student in the lab of this man when he conducted the experiment that bounced alpha particles off of gold foil, thus proving the existence of a positively charged nucleus.

ANSWER: Ernest **Rutherford**

[10] Polonium-210 undergoes alpha decay to form the 206 isotope of this element, which occurs at the end of the U-238 decay chain.

ANSWER: **Lead** [or **Pb**]

003-09-12-07213

14. These passages declare that the mourners will be comforted, the hungry will be filled, and the meek shall inherit the earth. For 10 points each:

[10] Name these set of blessings delivered by Jesus.

ANSWER: **Beatitudes**

[10] As told by Luke, the Beatitudes were delivered during this address often compared to its lengthier counterpart found in Matthew.

ANSWER: **Sermon on the Plain**

[10] Luke and Matthew differ in the number of criticisms or "woes" made against this group, members of which preached about binding laws, about God, and about oaths, but did not practice what they preached.

ANSWER: **Pharisees**

040-09-12-07214

15. Ida Tarbell wrote a book criticizing the business practices of this company. For 10 points each:

[10] Name this company founded in 1870 by Henry Flagler and John D. Rockefeller.

ANSWER: **Standard Oil** Company

[10] Standard Oil bought smaller drilling companies and began selling oil in order to control every aspect of the oil production process, an example of this type of integration. In this type of integration, a company owns its suppliers and its buyers.

ANSWER: **vertical** integration

[10] This other vertical monopoly was acquitted of federal antitrust charges in 1911, and was dominated by Elbert Gary in the first quarter of the twentieth century. In 1952, Truman took over this company's mines in order to supply the American army with metal during the Korean War.

ANSWER: **United States Steel**

024-09-12-07215

16. An indicator for several types of this disease is Gower's sign. For 10 points each:

[10] Name this disease with Duchenne and Becker types, characterized by ptosis and weakening muscles.

ANSWER: **muscular dystrophy** [prompt on **MD**]

[10] This other degenerative disease also manifests with muscle weakness, as well as nystagmus, or random involuntary eye movements. Scars in the white matter of the brain give this autoimmune disease its name.

ANSWER: **multiple sclerosis** [or **MS**]

[10] MS results from the destruction of this fatty material that covers the axon of a neuron. It is created by Schwann cells and oligodendrocytes.

ANSWER: **myelin** sheath

032-09-12-07216

17. This country was ruled by the Jagiellonian dynasty. For ten points each,

[10] Name this country that was later home the "Round Table Talks" and an organization based in the Gdansk shipyards, Solidarity.

ANSWER: **Poland**

[10] Poland was separated from Lithuania during this event that was opposed initially by Catherine II of Russia, before Fredrick the Great convinced her otherwise.

ANSWER: **first partition** of Poland [prompt on **partition** of Poland]

[10] Poland was united with Lithuania through this agreement in the namesake city in Poland.

ANSWER: Union of **Lublin**

033-09-12-07217

18. The surface of this planet is known from radar mapping by the Magellan orbiter. For 10 points each:

[10] Name this planet, whose surface is difficult to observe visually since it has a highly opaque, sulfuric acid atmosphere.

ANSWER: **Venus**

[10] This largest mountain on Venus is located to the east of the Lakshmi Planum. Its western face is very steep; its eastern face gradually slopes downward to the Fortuna Tessera.

ANSWER: **Maxwell** Montes

[10] Maxwell Montes is a prominent feature of this "continent" of Venus, which lies around the pole far north of the equatorial Aphrodite Terra.

ANSWER: **Ishtar** Terra [or **Ishtar** Land]

040-09-12-07218

19. The narrator of this work imagines visiting the “Towered cities” with “throng of knights and barons bold” and going to the theatre “If Jonson's learned sock be on.” For 10 points each:

[10] Name this poem which ends with its narrator deciding “Mirth, with thee I mean to live.”

ANSWER: “**L’Allegro**”

[10] “L’Allegro” and its companion piece “Il Penseroso” were written by this British poet, who tried to “justify the ways of God to men” in his epic *Paradise Lost*.

ANSWER: John **Milton**

[10] Milton asked for “the liberty to know, to utter, and to argue freely according to conscience, above all liberties” in this anti-censorship tract published during the English Civil War.

ANSWER: ***Areopagitica***: *A speech of Mr. John Milton for the liberty of unlicensed printing to the Parliament of England*

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20. The beseiging army in this battle were commanded by Carl Gustaf Rehnskiöld, and prior to this battle Lewenhaupt's forces had fled the battle of Lesnaya. For 10 points each:

[10] Name this battle, which King Charles XII could not command in person due to a foot wound, and which ended in the successful defense of its namesake Ukrainian city.

ANSWER: Battle of **Poltava**

[10] The battle of Poltava was a major conflict in this war between Russia and Sweden.

ANSWER: **Great Northern War**

[10] This treaty ended the Great Northern War and saw Russia return Finland to Sweden, though it took Ingria, Estonia, and Livonia.

ANSWER: Peace of **Nystad**

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21. In 1981, this country's president jailed the author Nawal El Saadawi for criticizing his one-party rule. For 10 points each:

[10] Name this country whose modernist movement was spearheaded by the author Taha Hussein. This country's ancient literature includes the *Story of Sinuhe*.

ANSWER: Arab Republic of **Egypt**

[10] Anwar Sadat banned this Egyptian author's novel *Chitchat on the Nile* for attacking the decadence of the Nasser presidency. He may be best known for writing *Midaq Alley* and the *Cairo Trilogy*.

ANSWER: Naguib **Mahfouz**

[10] In this novel by Mahfouz, Elwan and Randa attempt to start a life together, but are thwarted by the corruption spawned by Sadat's economic policy, the Infitah. It climaxes with the 1981 assassination of Sadat.

ANSWER: *The **Day the Leader was Killed***

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