

1. For an ideal turbine, this quantity is given by one minus the pressure ratio to the quantity one minus specific heat ratio all over specific heat ratio. In general, this quantity characterizes the forward operation of systems that, when run in reverse, are characterized by coefficients of performance. Defined as the ratio of useful work evolved to heat input, this quantity is maximized for reversible processes according to one statement of the Second Law of Thermodynamics. For 10 points, name this quantity that, for a two-reservoir heat engine, is bounded by one minus the temperature ratio, a value for this quantity named for Carnot.

ANSWER: the thermal **efficiency** [prompt on **eta**]

065-09-12-18102

2. The son of this structure's architect used a similar style to design the John Sowden House. Two long wings connect via breezeways to the central part of this structure, whose roofs are designed to look like pyramids. Oya stone was used in this building's construction to amplify the effect of the Maya Revival Style. When it was demolished in 1968 due to its sinking foundation, its facade and reflecting pool were moved to a museum nearly 250 miles away. Its copper roof, cantilevered floors, and suspended piping allowed it to survive a great disaster in 1923. For 10 points, name this structure that withstood the Great Kanto Earthquake, a lodging for travelers designed by Frank Lloyd Wright and located in Tokyo.

ANSWER: **Imperial Hotel** in Tokyo [or Tokyo **Imperial Hotel**]

040-09-12-18103

3. One of this politician's campaign slogans came from General Edward Bragg's speech declaring "they love him most for the enemies he has made." This candidate ran on the motto "Public office is a public trust." He won a key state after his opponent dined with multimillionaires at Delmonico's the week before the election. Prohibition candidate John St. John took votes that helped this Democrat win New York by a small margin. This man was politically damaged when his relationship with Maria Halpin was publicized. For 10 points, name this Democrat supported by the Mugwumps, who survived a scandal about his illegitimate son to defeat James G. Blaine in 1884.

ANSWER: Stephen Grover **Cleveland**

003-09-12-18104

4. The prologue of one of this author's novels declares "The future belongs to crowds." In that novel by this author, whose sections are separated by photographs of people pressed against a chain-link fence and Iranians demonstrating under the face of the Ayatollah Khomeini, the kidnapping of Jean-Claude Julien inspires a reclusive author to travel to Beirut. One of this author's protagonists becomes exposed to the chemical Nyodene D, and learns that Willie Mink is having sex with his wife Babette in exchange for the drug Dylar. This author fictionalized the life of Lee Harvey Oswald in *Libra*, and wrote about the death of Bill Gray in *Mao II*. For 10 points, name this American novelist who wrote about the death fears of Professor Jack Gladney in his 1985 novel *White Noise*.

ANSWER: Don **DeLillo**

063-09-12-18105

5. These organisms have a unique mu T cell receptor and have epipubic bones. They can be classified based on whether they are diprotodont or polyprotodont. Some families of them have paired sperm, most notably the Didelphidae family, and most of them have biphid reproductive organs. A namesake facial tumor disease is threatening the largest extant carnivore in this group of organisms. Their milk can change composition, one of the consequences of increased importance of the lactation phase in development. Extinct organisms in this group include the thylacine, variously known as a certain island's "tiger" or "wolf." For 10 points, name this group of mammals, most of which have their young develop in a pouch.
ANSWER: **marsupials** [prompt on **Metatheria**]

001-09-12-18106

6. This daughter of King Iasos gave birth to Parthenopaios, one of the Seven Against Thebes. This woman killed two centaurs named Rhoecus and Hylaeus. After a man killed her uncles Plexippus and Toxeus, he died when his mother burned the stick that was tied to his life. In another story, this woman and her lover made love in a temple of Cybele's, prompting her to turn them into lions. This woman joined Meleager in the Calydonian boar hunt, and only married after Hippomenes begged Aphrodite to help him beat her at a contest. For 10 points, name this huntress who married Hippomenes after he beat her in a footrace with the help of golden apples.
ANSWER: **Atalanta** [accept **Atlanta**]

026-09-12-18107

7. It was first organized at a tournament hosted by Thibaut of Champagne, although it had earlier been preached for by Fulk of Neuilly. Geoffrey de Villehardoin chronicled about this event, the aftermath of which saw the establishment of the Empire of Nicaea and the Despotate of Epirus. It was at the court of Philip of Swabia that the course of this event changed, although Enrico Dandolo was responsible for the plunder of Zara, a port under Hungarian control. Baldwin of Flanders, the ruler of the most important polity that emerged from it, was humiliated by the Bulgarians at the Battle of Adrianople in 1205. Its participants under Boniface of Montferrat gathered at Venice and originally intended to attack Egypt, but when Alexius Angelus sought help, their objective changed. For 10 points, what Crusade ended in a savage sacking of Constantinople?
ANSWER: the **Fourth Crusade**

034-09-12-18108

8. One of this man's song cycles includes pieces about a child's encounter with a beetle and a cat named "Sailor" trying to eat a canary. Another of this composer's song cycles consists of four songs, including "Lullaby," about a mother cradling her sickly child, and "Trepak," about a drunken peasant freezing in a blizzard. This composer of *The Nursery* and *Songs and Dances of Death* wrote a tone poem which ends with the sound of church bells dispelling dancing witches on St. John's Eve. A piano suite by this author includes the movements "Bydlo" and "The Hut on Fowl's Legs," and begins with a "Promenade" depicting the composer walking to view the works of Viktor Hartmann. For 10 points, name this Russian composer of *Night on Bald Mountain* and *Pictures at an Exhibition*.
ANSWER: Modest Petrovich **Mussorgsky**

052-09-12-18109

9. One province in this nation is Podlasie, which is home to one of the last patches of Europe's primeval forest, Bialowieza Forest, home to some of Europe's last wisent. Sites in this country bordered on the east by the Bug River include the Masurian Lakes as well as the town once known as the "Jewish Oxford," Lublin. This nation is south of the exclave of Kaliningrad Oblast, and this nation's principal seaport is Gdansk, a city in this nation's region of Pomerania. Rivers in this country include the Oder and Neisse on its western border and the Vistula which flows through its city of Krakow. For 10 points, name this Eastern European nation south of the Baltic and west of Belarus with capital at Warsaw.

ANSWER: Republic of **Poland**

059-09-12-18110

10. This thinker noted the inefficacy of declarations of human rights that are not incorporated into positive law in *On Revolution*. This philosopher described how the Western philosophical tradition has subordinated the life of action and appearance to that of contemplation in *The Human Condition*. However, this thinker is better known for a work about a figure defined by stock phrases and clichés who is brought to the House of Justice. This author also wrote another work about a governmental system promoted by the superfluous masses which analyzed the rise of Nazi Germany and the Soviet Union. For 10 points, name this German Jewish author of a work on the "banality of evil," *Eichmann in Jerusalem*, as well as *On the Origins of Totalitarianism*

ANSWER: Hannah **Arendt**

059-09-12-18111

11. This practice was outlawed in a bill supported by Andrew Furuseth and Robert La Follette, Sr. "Crimps" engaging in this activity rarely victimized Native Americans because they did not want trouble with the Bureau of Indian Affairs. Tunnels for keeping people for this practice were found under Portland, Oregon. Both main party bosses in 1880s San Francisco supported this practice, even after the 1872 Shipping Commissioner's Act attempted to stop it. For 10 points, name this practice of tricking, beating, or otherwise forcing men into involuntary servitude on ships, named after the Far East port to which many of those ships allegedly headed.

ANSWER: **shanghaiing** [or **crimping** early; do not accept or prompt on "impressment," which specifically refers to a navy and does not fit any of the clues]

003-09-12-18112

12. This ruler adopted a banner depicting eiraku coins and used an official seal labeled "rule the empire by force." This ruler promoted commerce by abolishing toll barriers and establishing a policy of free markets and open guilds in Kano. This ruler constructed the fortress of Azuchi Castle, ordered the massacre of the warrior monks at Mount Hiei, and defeated Imagawa Yoshimoto at the Battle of Okehazuma. He allied with Tokugawa Ieyasu to win the Battle of Nagashino, but was killed by Akechi Mitsuhide in 1582. For 10 points, name this daimyo whose goal of unifying all of Japan was achieved by his successor Toyotomi Hideyoshi.

ANSWER: Oda **Nobunaga** [or Oda **Kippôshi**]

004-09-12-18113

13. This author wrote an essay in which he removes the entire contents of a hotel fridge in an attempt to store a smoked salmon. Another of his works features the title figure's partnership with the monopod Gavagai, and Roberto della Griva becomes obsessed with his evil twin after being shipwrecked near the International Date Line in his *The Island of the Day Before*. Three editors' use of Abulafia to create the Plan leads to Belbo's hanging on the title object in one of his works, and this author wrote about a series of mysterious deaths in a monastery in a novel narrated by Adso of Melk. For 10 points, name this Italian author of *Foucault's Pendulum* and *The Name of the Rose*.

ANSWER: Umberto **Eco**

032-09-12-18114

14. Dichotic listening tests provided evidence in support of Broadbent's filter model of this process. The dominant model of this phenomenon posits that people integrate separate feature maps into a saliency map. The cocktail party effect is an example of the ability of the auditory system to direct this phenomenon. A mental disorder in which people demonstrate impairment in this process as well as hyperactive behavior is commonly treated with stimulants such as Ritalin. For 10 points, name this ability to selectively concentrate on something, whose deficit causes a common disorder in young children.

ANSWER: **attention**

004-09-12-18115

15. The goal of NASA's planned Dawn mission is expected to reach one of these objects, which was discovered in 1801 by Giuseppe Piazzi in a location predicted by the Titius-Bode Law. Another of these objects was described by the IAU as having "a shape resembling a plump cigar" and is orbited by Hi'iaka and Namaka. Still another object this type has a satellite that was once nicknamed Gabrielle before being renamed Dysnomia. Perhaps the best-known of these objects was reclassified because it had not "cleared the neighborhood around its orbit," specifically because certain Kuiper Belt objects share that orbit. That object of this type is orbited by the moon Charon. For 10 points, name this classification used for Haumea, Makemake, Eris, and Ceres, which was created in 2006 as a new way to describe Pluto.

ANSWER: **dwarf planets** [do not accept or prompt on "planets"; prompt on **asteroids** before "Hi'iaka"; prompt on **minor planets**; prompt on **planetoids**; prompt on **subplanets**]

023-09-12-18116

16. In one of this author's plays, the protagonist calls himself a "poet and poltroon, poltroon and poet" and quotes Shelley's line "Ah me! Alas, pain, pain ever, for ever!" after learning that soldiers killed a woman who bravely hid Mr. Maguire's bag of bombs. Another play by this author ends with a character asserting that "the world's in a terrible state of chassis!" This author wrote a play in which Minnie Powell sacrifices herself to protect the cowardly poet Donal Davoren, as well as a play about a family that becomes unable to collect a legacy because of the incompetence of Charles Bentham. In that play by this author, Joxer Daly constantly drinks with Captain Boyle, the strutting husband of the first title character. For 10 points, name this Irish playwright of *The Shadow of a Gunman* and *Juno and the Paycock*.

ANSWER: Sean **O'Casey**

004-09-12-18117

17. Kevlar and Nomex consist of repeating units of this molecule crosslinked by amide groups. Hafner and Fisher created a sandwich compound consisting of two of these atoms flanking a chromium atom. When this molecule changes hapticity from six to four, it folds along one axis of symmetry. This molecule can be reacted with propylene to yield cumene, and another derivative of it is used with chloroform in DNA extraction. That derivative, which is distinguished by the presence of an attached hydroxide ion, is phenol. For 10 points, name this compound that obeys Huckel's rule, an aromatic ring-shaped molecule with formula C_6H_6 .

ANSWER: **benzene**

059-09-12-18118

18. The state of Niyata Micchaaditthi, or permanent skepticism, is one of the garuka kinds of this concept. Kameesu and Paanaatipaata are examples of the ten akusala kinds of this concept, which is also divided into upabidaka, or obstructive, and upaghataka, or destructive types. According to Jainism, this concept causes tiny particles of dirt to impart le'sya, or color, to people's souls. This concept is mainly caused by avijja, or ignorance, and results in vipaka. Arhats do not accumulate new kinds of this concept, but are affected by past kinds. For 10 points, name this concept from Hinduism and Buddhism, the idea that people's intentional actions influence their future lives.

ANSWER: **karma** [or **kamma**]

004-09-12-18119

19. In one work by this painter, a man in white stares at his extended index finger while a man in blue holds a musket over his shoulder and stares at the viewer. In that painting, this artist showed a massive blue-and-white checked flag behind a horse baring its buttocks to the viewer. He painted two men doffing their caps while one places his right hand on the other's shoulder in that painting, in which pikes and battle-axes dominate the skyline. He painted a picture of Justin of Nassau handing the key to a city to Ambrosio Spinola, a painting sometimes called *The Lances*. For 10 points, name this painter who executed the *Surrender at Breda* and also depicted the Infanta Margarita in his *Las Meninas*.

ANSWER: Diego **Velázquez** [accept Diego Rodríguez de Silva y **Velázquez**]

026-09-12-18120

20. This character's husband becomes suspicious of her when she tells a former lover "you always look so cool." When this character learns that her baby is a girl, she scornfully remarks that "the best thing a girl can be in this world" is "a beautiful little fool." This character, whose voice is identified as being "full of money," fell in love with the title character of the novel she appears in as an eighteen year old in Louisville. This character drives the gold coupe that runs over Myrtle Wilson, resulting in the murder of her lover, who is captivated by the green light at the end of her dock. For 10 points, name this character who finally refuses to leave Tom Buchanan for Jay Gatsby at the end of *The Great Gatsby*.

ANSWER: **Daisy** Buchanan [or **Daisy** Fay; or Daisy **Fay**; prompt on **Buchanan** before mentioned]

004-09-12-18121

21. One of these species sucks the blood of masked boobies when water is scarce, and exhibits a unique soil-scratching behavior that allows it to smash booby eggs. Currently controversy exists over whether these species should be placed into as many as six genera or just one genus, *Geospiza*. Bmp4 and calmodulin are among the molecules that influence the size and shape of their most widely-studied feature. All but one of these species studied by Peter and Rosemary Grant live in the same island chain, while the other lives on Cocos Island. For 10 points, name this group of fourteen species that mainly live in the Galapagos Islands, whose variety in beak size and shape make them an ideal model organism for studying speciation.

ANSWER: **Darwin's Finches** [prompt on **finches**; prompt on **Galapagos finches**; prompt on *Geospiza difficilis* or **vampire finch** before *Geospiza* is mentioned]

003-09-12-18122

22. In one of this author's novels, Selina Redwood rescues a Schiaparelli dress from a collapsing house instead of Joanna Childe, causing Nicholas Farrington to convert to Catholicism. In addition to writing a novel about the women who inhabit the May of Teck Club, this author created a character who attempts to manipulate Rose into sleeping with Mr. Lloyd and victimizes Mary Macgregor. In a novel by this author, the title character advises Joyce Emily to fight for Franco during the Spanish Civil War, but is forced to resign after her special student, Sandy Stranger, accuses her of being a fascist. For 10 points, name this Scottish novelist of *The Girls of Slender Means* who wrote about a teacher at the Marcia Blaine School for Girls in *The Prime of Miss Jean Brodie*.

ANSWER: Muriel **Spark**

052-09-12-18123

23. The name of a modern-day country stems from the "ten arrows" alliance that this people joined. This group reversed a loss dealt by Margrave Luitpold at the Battle of Pressburg, similar to a defeat they dealt to Louis the Child near Augsburg. Although they raided settlements up to Otranto and the Pyrenees and extracted a tribute from the Byzantines, this group was defeated at Lechfeld by Otto the Great, after which their ruler Geza adopted Christianity and this tribe formed a kingdom first led by Stephen I. For 10 points, name this tribe that settled and formed the Kingdom of Hungary.

ANSWER: **Magyars** [or **Hungarian**s until Hungary is mentioned]

020-09-12-18124

1. The second of these opens with an image of a maid emerging from the marriage of song and lyre and the first opens with a tree ascending. For 10 points each:

[10] Name this sonnet sequence which was written in memory of the dancer Vera Knoop.

ANSWER: *The Sonnets to Orpheus* [or *Die Sonette an Orpheus*]

[10] *The Duino Elegies* and *The Notebooks of Malte Laurids Brigge* are works of this German author of *The Sonnets to Orpheus*.

ANSWER: Rainer Maria **Rilke**

[10] Rilke wrote a poem about the Archaic Torso of this Greek god of light and medicine, among many other things. In *The Eumenides*, the final work of Oresteia, he acts as an attorney for Orestes.

ANSWER: **Apollo**

034-09-12-18201

2. The 1987 Meech Lake Accord proposed a group of amendments to this document that were ultimately rejected. For 10 points each:

[10] Name this document, whose bill of rights, the 1982 Charter of Rights and Freedoms, includes the notwithstanding clause allowing local legislatures to override parts of it.

ANSWER: **Constitution** of **Canada** [or clear-knowledge equivalents]

[10] The failure of the Meech Lake Accord, which would have given this province a constitutional veto, increased popular agitation for it to separate from Canada.

ANSWER: Province of **Quebec**

[10] The 1867 Constitution Act gave the Canadian parliament legislative jurisdiction under the three entities mentioned in this phrase. This motto is often seen as encapsulating the aims of Canadian government, in contrast to the American ideal of "life, liberty, and the pursuit of happiness."

ANSWER: **peace, order, and good government** [or **POGG**]

004-09-12-18202

3. The Kerr effect is a quadratic change in the index of refraction due to one of these. For 10 points each:

[10] Name this quantity that is related to the displacement field by the susceptibility.

ANSWER: the **electric field** [prompt on **E**-field]

[10] The presence of an external, static electric field results in the splitting of spectral lines in this effect.

ANSWER: the **Stark** effect

[10] This law gives the force on one static charge due to another. It can be generalized to give the static electric field due to a point charge as a constant times charge over distance squared times a unit outward vector.

ANSWER: **Coulomb's** law

032-09-12-18203

4. A self-portrait of this photographer depicts him holding a cane topped with a skull. For 10 points each:
[10] Name this American photographer, who snapped many portraits of his friend Patti Smith. Senator Jesse Helms attacked the National Endowment for the Arts for funding *The Perfect Moment*, an exhibit including an explicit photograph involving a bullwhip taken by this artist.

ANSWER: Robert **Mapplethorpe**

[10] Mapplethorpe was influenced by the many photographs of nudes taken by this founding member of f-stop-64. This American photographer took numerous pictures of nautilus shells and green peppers.

ANSWER: Edward **Weston**

[10] Another founding member of f-stop-64 was this photographer of *Moonrise, Hernandez, New Mexico*. He gained renown for photographs of National Parks such as his iconic *Moon and Half Dome, Yosemite*.

ANSWER: Ansel **Adams**

004-09-12-18204

5. Two of the four characters in this poem are described as compliant because "much casual death had drained away their souls." For 10 points each:

[10] Identify this poem from Anthony Hecht's volume *Hard Hours*, which takes its title from the last words of Goethe and describes a German officer who orders two Jews buried alive and then shoots a Polish man in the stomach.

ANSWER: "**More Light, More Light**"

[10] The author of "More Light, More Light," Anthony Hecht, studied under this poet at Kenyon College. This member of the Fugitives wrote the poem "Bells for John Whiteside's Daughter" and helped usher in New Criticism, which took its name from his essay collection *The New Criticism*.

ANSWER: John Crowe **Ransom**

[10] Hecht was a high school classmate of this prose writer, whose works include *Maggie Cassidy* and a novel about Sal Paradise, who initially travels to Denver with Dean Moriarty.

ANSWER: Jack **Kerouac** [or Jean Louis Lebris de **Kerouac**]

019-09-12-18205

6. For 10 points each, name these hominid fossils.

[10] In 1974, Donald Johansen and Tom Gray discovered this female Australopithecus afarensis skeleton, who lived three point two million years ago and was able to walk upright on two feet.

ANSWER: **Lucy** [or **AL 288-1**]

[10] Lucy was the oldest known bipedal hominid until the discovery of this female skeleton near the Awash river in Ethiopia. This A. ramidus fossil lived four point four million years ago and had a grasping big toe enabling her to climb trees when she wasn't walking upright.

ANSWER: **Ardi**

[10] This nearly complete skeleton of an eleven or twelve year old Homo erectus was discovered by Kamoya Kimeu in 1984. This one point five million year old fossil is the most complete Homo erectus skeleton ever found.

ANSWER: **Turkana Boy** [or **Nariokotome Boy**; or **KNM-WT 15000**]

004-09-12-18206

7. This molecule is activated by 25-hydroxylase in the liver and 1-alpha-hydroxylase in the kidney. For 10 points each:

[10] Name this fat-soluble vitamin important for maintaining calcium levels and regulating blood pressure.

ANSWER: Vitamin **D** [or **calciferol**]

[10] Vitamin D is a derivative of this fatty substance, which regulates the permeability and fluidity of the cell membrane and is transported in the blood by lipoproteins.

ANSWER: **cholesterol**

[10] Vitamin D regulates blood pressure by suppressing expression of this protein, which cleaves angiotensin into angiotensin I, which is then converted by ACE to angiotensin II.

ANSWER: **renin**

032-09-12-18207

8. Name these Old Testament prophets, for 10 points each.

[10] The namesake book of this prophet notes that "all flesh is grass" and predicts that "a Virgin shall conceive, and bear a Son." He was sawed in half.

ANSWER: **Isaiah**

[10] This prophet is at the center of an allegorical book in which he is told to marry the harlot Gomer and have a son named Jezreel.

ANSWER: **Hosea**

[10] This minor prophet took up Josiah's call to stop the destruction of holy places and threatened to destroy the last remnant of Baal, which came in the form of foreign culture and moral corruption.

ANSWER: **Zephaniah** [or **Tzfanya**]

015-09-12-18208

9. The speaker of this poem likes "Bessie, bop, or Bach," and addresses a figure who is "older--and white--and somewhat more free." For 10 points each:

[10] Name this poem whose speaker describes himself as "twenty-two, colored, born in Winston-Salem," and asks "So will my page be colored that I write? / Being me, it will not be white." It is structured as a response to a classroom assignment.

ANSWER: "**Theme for English B**"

[10] This Harlem Renaissance poet wrote "Theme for English B" as well as "The Negro Speaks of Rivers" and a poem which questions "What happens to a dream deferred?"

ANSWER: Langston **Hughes**

[10] Hughes' poem "Dream Variations" concludes with this three-word phrase after its speaker imagines "Night coming tenderly." This phrase titles a book by John Howard Griffin in which he darkened his skin to pass for black in the South.

ANSWER: **black like me**

022-09-12-18209

10. Adding extra tapes to these do not increase their power. For 10 points each:

[10] Name these computer science constructs named after a British mathematician. The universal type is capable of simulating any computer.

ANSWER: **Turing** machines

[10] Along with Turing, this man names the thesis that, for any computable function, there exists a Turing machine or lambda calculus procedure that can compute it.

ANSWER: Alonzo **Church**

[10] The Cobham-Edmonds thesis states that computational problems are feasible only if they belong to this time complexity class. This is the set of problems solvable by a deterministic Turing machine in sub-exponential time.

ANSWER: **P** (or **polynomial** time)

001-09-12-18210

11. This man's son Gamal is a rising star in the National Democratic Party, and may succeed him as ruler. For 10 points each:

[10] Name this autocratic leader of Egypt, who has reigned since the 1981 assassination of Anwar Sadat.

ANSWER: Hosni **Mubarak**

[10] The most consistent opposition to Mubarak has come from this militant organization, which inspired much of present-day Islamist politics through its influential members Hasan al-Banna and Sayyid Qutb.

ANSWER: the **Muslim Brotherhood** [or al-**Ikhwan al-Muslimun**]

[10] After youthful involvement with the Muslim Brotherhood, this doctor joined the Egyptian wing of the more radical Islamic Jihad. He is now considered the chief fundraiser and strategist, and overall second-in-command, for Al-Qaeda.

ANSWER: Ayman al-**Zawahiri**

019-09-12-18211

12. In this opera, Sergeant Belcore sings the cavatina "Come paride" in order to court the female lead. For 10 points each:

[10] Name this opera about the romance between Adina and Nemorino, who buys a potion from Dr. Dulcamara that turns out to be cheap red wine.

ANSWER: *The **Elixir of Love*** or *L'**elisir d'amore***

[10] *The Elixir of Love* was written by this Italian composer, who adapted a Sir Walter Scott novel for his *Lucia di Lammermoor*

ANSWER: Gaetano **Donizetti**

[10] After seeing Adina crying, Nemorino realizes that she loves him and sings this joyful aria in celebration.

ANSWER: "Una **Furtiva Lagrima**"

064-09-12-18212

13. This god summoned a river to separate his daughter and her lover, but then allowed them to meet on a bridge on the seventh day of the seventh month. For 10 points each:

[10] Identify this father-in-law of a cowherd and ruler of all beings in the universe save the Three Pure Ones. He attained golden immortality after over 200 million years of trials.

ANSWER: **Jade Emperor** [or **Yù Huáng** Shangdi; or **Yù Dì**]

[10] The Jade Emperor is the head of this mythology, which also venerates Pangu, who was born from a cosmic egg, and Archer Yi, who shot down several suns.

ANSWER: **Chinese** mythology [or **Taoist** mythology works too]

[10] Chinese mythology holds that there are this number of trigrams, pairing them in every possible way in the *I Ching*. In addition, it holds that there are this number of "Immortals" living in Mount Penglai.

ANSWER: **eight**

020-09-12-18213

14. This theorem is only valid for piecewise smooth curves. For 10 points each:

[10] Name this theorem according to which the right-handed line integral of a vector function in the plane around a closed curve is equal to the upward area integral of the curl of that same function over the area bounded by the curve.

ANSWER: **Green's** theorem [prompt on the **curl** theorem; prompt on **Stoke's** theorem]

[10] Green's theorem is a two-dimensional case of this three-dimensional theorem, according to which the circulation of a vector field is the surface integral of its curl around any bounded surface.

ANSWER: **Stokes's** theorem

[10] Surfaces integrals use a vector that has this property with respect to any vector in the surface in question. Two vectors with this property have a dot product of zero.

ANSWER: **normal** [accept **orthogonal** or **perpendicular** or anything else implying they are **90 degrees** apart from each other]

064-09-12-18214

15. This man was not even supposed to be on the case for which he is best remembered, having taken it up after James Delancey disbarred James Alexander and William Smith. For 10 points each:

[10] Name this lawyer who thwarted the best schemes of William Cosby in getting the jury to decide that his client was not guilty of libel in a 1735 trial.

ANSWER: Andrew **Hamilton**

[10] This was Hamilton's client, a German-born printer who had published several unflattering articles in the *Weekly Journal* denouncing Cosby's actions.

ANSWER: John Peter **Zenger**

[10] The John Peter Zenger trial occurred in this colony, which years earlier had seen the annexation of New Amsterdam by forces under the future James II.

ANSWER: **New York**

003-09-12-18215

16. It replaced a crucible centered process developed by Benjamin Huntsman, and was independently developed by William Kelly. For 10 points each:

[10] Name this process whose Very Low Nitrogen form blows oxygen and steam into a chamber instead of regular air.

ANSWER: **Bessemer** Process

[10] The Bessemer process turns iron into this substance by removing various impurities.

ANSWER: **steel**

[10] This is the collective term for those impurities that are removed in the Bessemer process as well as other smelting process.

ANSWER: **slag**

040-09-12-18216

17. A skeleton can be seen to the left of a host of sleeping figures in this man's painting *Death and Life*.

For 10 points each:

[10] Name this art nouveau painter who also created the *Beethoven Frieze*.

ANSWER: Gustav **Klimt**

[10] A man with a crown of vines and a woman with flowers in her hair embrace in this Klimt painting known for its heavy use of gold leaf.

ANSWER: *The **Kiss*** [or *Der **Kuss***]

[10] Klimt also led "Vienna Secession" movement, which for a time included this Austrian founder of the New Art Group, who painted quasi-pornographic scenes like *Death and the Maiden* and *Agony*.

ANSWER: Egon **Schiele** (SHALE-uh)

030-09-12-18217

18. He was exiled after the Athenian defeat at the Battle of Amphipolis, though he argued that the city was lost as a result of forces outside of his control. For 10 points each:

[10] Name this historian, who used the opportunity of his exile to write the *History of the Peloponnesian War*,

ANSWER: **Thucydides**

[10] One notable incident in the *History of the Peloponnesian War* is this speech which describes the Athenian government as one which not only offers equal justice to all, but also recognizes the claim of excellence, so that Athens serve as the school of all Hellas.

ANSWER: **Pericles's Funeral Oration** [accept variations indicating a speech given by Pericles to memorialize the dead]

[10] Despite the ideals embodied in Pericles' Funeral Oration, Athens saw defeat in the Peloponnesian War, leading to the imposition of this collaborationist government on the city by Sparta.

ANSWER: the **Thirty Tyrants**

059-09-12-18218

19. This genre of plays was developed by British authors such as George Etherege and William Wycherley. For 10 points each:

[10] Name this type of comedy which uses stock characters and cleverly constructed plots to examine relationships between upper-class men and women and to mock social pretensions.

ANSWER: comedy of **manners**

[10] The comedy of manners dominated the British stage during this period, which saw Charles II return to the throne and reopen British theaters in 1660.

ANSWER: the **Restoration**

[10] This author of *Love for Love* wrote about the lovers Mirabell and Millamant in his comedy of manners *The Way of the World*.

ANSWER: William **Congreve**

059-09-12-18219

20. The author of *Political Liberalism*, this philosopher argued in another work that basic liberties could not be infringed upon even if it would increase the general welfare. For 10 points each:

[10] Name this author of *A Theory of Justice*.

ANSWER: John **Rawls**

[10] In *A Theory of Justice*, Rawls imagined a group of people who were not aware of their social and economic circumstances organizing a just society from the “original position.” Give the name of this concept of that lack of knowledge.

ANSWER: **Veil of Ignorance**

[10] Rawls revived this concept earlier discussed by Locke and Rousseau which assumed that society functioned based on an agreement between the government and the citizens.

ANSWER: **Social Contract**

030-09-12-18220

21. This house’s first monarch was Philip VI, and it also spawned Charles VII, who was crowned during the Hundred Years War with the help of Joan of Arc. For 10 points each:

[10] Name this French dynasty, which descended from and followed the Capetians.

ANSWER: **Valois**

[10] This Valois monarch hardened his views against Protestants after the Affair of the Placards and met with Henry VIII of England at the Field of the Cloth of Gold.

ANSWER: **Francis I** [prompt on **Francis**]

[10] Francis retook Milan by defeating some Swiss cantons and Maximilian Sforza at the 1515 Battle of Marignano, thus ending this phase of the Italian Wars.

ANSWER: War of the **League of Cambrai**

015-09-12-18221