

2015 George Oppen: Questions courtesy of Anne Hathaway's cow-milking fingers
Written by Aauroni Gupta, Stephen Eltinge, and Mike Cheyne
ROUND 12

TOSSUPS

1. A geriatric alcoholic publisher named Samuel Riba celebrates this holiday in a 2010 novel by Enrique Vila-Matas. In 2006, official festivities on this holiday were canceled due to the funeral of Charles Haughey. A Roman temple to Isis in the town of Szombathely, Hungary has been appropriated to serve as the site of festivities on this holiday, because the town is the birthplace of Virag Rudolf. In 1956, Ted Hughes and Sylvia Plath got married on this holiday. This holiday is in part a celebration of a walk its originator undertook with his future wife (*) Nora Barnacle. Participants in this holiday often stop for gorgonzola sandwiches at Davy Byrne's pub, but they probably don't pee in gardens or masturbate on the beach. In 2012, Laura Baxter kicked the celebration of this holiday up a notch when she delivered, for two and a half hours, Molly's entire soliloquy. For 10 points, name this holiday which takes place annually on June 16, in which people worldwide and in Dublin in particular retrace the steps of the protagonist of *Ulysses* by James Joyce.

ANSWER: Bloomsday [or June 16 before it is read]

2. Description acceptable. This image was given the Warhol Marilyn Monroe graphic treatment in a forgery created by Gerard Malanga. A subtle "F" was added to the shoulder of the person in this image in a new rendition of it by Irish artist Jim Fitzpatrick. Giangiacomo Feltrinelli popularized this image and placed his copyright in a corner instead of crediting the original artist. Paul Davis painted this image for New York City subway billboards advertising an issue of the *Evergreen Review*. Because this image was taken with a Leica M2 camera with a 90-mm lens, the company Leica itself used it in an ad campaign. (*) Alberto Korda took the original black-and-white version of this photograph at a memorial service for the victims of the *La Coubre* freighter explosion, but it is best-known for the colored version in which the background is red and the star on the subject's beret is yellow. For 10 points, name this iconic photograph of a Latin American revolutionary.

ANSWER: Guerrillero Heroico [or Heroic Guerrilla Fighter; or the famous photograph of Che Guevara; accept equivalents]

3. In geochemistry, Wood and Spera calculated the effect of dissolved sodium chloride on this phenomenon. A constant linked with this phenomenon is theoretically equal to $2a$ over bR in van der Waals gases.

Ophthalmologist Selig Percy Amoils refined a method of cataract extraction using a tool that undergoes this process at its tip. This phenomenon is quantified by a coefficient calculated as the volume times αT minus 1 over the heat capacity at constant pressure. Like the Boyle temperature curve, the curve visualizing this phenomenon on a temperature-pressure diagram is parabolic. The Hampson- (*) Linde cycle, which is used in air separation, relies on this isenthalpic effect. Apart from hydrogen, helium, and neon, all gases at room temperature experience the negative form of this effect, which changes sign at the inversion temperature, meaning that those gases cool as they expand. For 10 points, name this phenomenon used in many refrigerators, caused by forcibly throttling a liquid through a valve.

ANSWER: Joule-Thomson effect [or Joule-Thomson expansion; or Joule-Kelvin effect; or throttling before mention]

4. The protagonist of this novel survives a terrible night, during which a cat runs over his lover's face, and at the end of which a schoolmistress punishes him for oversleeping by destroying his coffee-pot. The protagonist of this novel lies down in a warm sleigh, which he leaves only after a man orders that the horses drawing it be unharnessed. A woman in this novel becomes a social pariah after tearing up a letter sent to her by the creep Sortini. Because the protagonist of this novel cannot tell his assistants (*) Jeremiah and Arthur apart, he calls them both Arthur. This novel abruptly ends on the phrase "She spoke with difficulty, it was hard to understand her, but she said," an oddity preserved by Max Brod when he revised this novel to continue past the point where the barmaid Frieda leaves the protagonist. In this novel, the protagonist continually tries to reach Klammm, a high-ranking official in the bizarre bureaucracy of the title structure, which governs the village below. For 10 points, name this unfinished novel about the land-surveyor K., written by Franz Kafka.

ANSWER: *The* Castle [or *Das* Schloss]

5. Cable 243 was sent out in the wake of an incident in which members of this religion were attacked as soldiers confiscated an intact heart. Associated Press reporter Peter Arnett was punched on the nose while covering protests held by this religious group. Diplomats William Trueheart and Frederick Nolting disagreed about what to do about the mistreatment of people of this religion. Several members of this religion were shot for flying a flag with blue, yellow, red, white, and orange vertical stripes, and a sixth stripe consisting of all five of those colors, on Vesak day. The "crisis" named for this religion ended after two brothers were (*) executed at the back of an armored personnel carrier. The horrible woman Madame Nhu equated members of this religion with Communists. Malcolm Browne won a Pulitzer for his photograph of the death of a member of this religious group, Thich Quang Duc, by self-immolation. For 10 points, name this persecuted majority religion in South Vietnam during the presidency of the Catholic Ngo Dinh Diem.

ANSWER: Buddhists [or Theravada Buddhists if you want to be needlessly specific, but accept other kinds]

6. This man is struck in the leg by a spear while paralyzed with fright from a bird flapping and shrieking in front of him. A mysterious interloper named Drances tries to turn public opinion against this man. This man chases a phantom of his enemy all the way to an anchored ship, at which point the goddess who created the phantom severs the moorings. This man orders the incineration of several ships, but instead of burning down, they sink and reemerge as nymphs, because they were built from the magical lumber of Cybele's sacred forest. Pandarus accidentally lets this man through the gates of a fortress. This man's (*) sister dresses up as a man named Camers to provoke a fight so that this man wouldn't have to fight a duel. This man mercilessly rips off the belt of Pallas after killing him. This man, who was driven with bloodlust by Allecto, dies in a single duel despite the best efforts of his sister Juturna, and was the main suitor of Latinus's daughter Lavinia. For 10 points, name this king of the Rutuli, the antagonist of the second half of the *Aeneid*.

ANSWER: Turnus

7. Outside a courtroom holding a trial for violators of this act, protesters chanted slogans like "Adolf Hitler never died / He's sitting at Medina's side." The physical education teacher Rudolph Fahl, as well as George Christians, the chief officer of the Crusader White Shirts, were arrested for violating this act by disseminating materials within the army. The Virginian namesake of this act later attempted to delay passage of the Civil Rights Act of 1964 in his position as chairman of the Rules Committee. *Yates v United States*, which severely limited the applicability of this act, was decided six years after Judge Learned Hand formulated the "clear and probable danger" test in his affirmation of convictions under this act in (*) *Dennis v. United States*. This act was used against Harry Bridges, an Australian-born labor organizer, as well as William Z. Foster, the General Secretary of the Communist Party of the United States. For 10 points, name this 1940 act which required non-citizen Americans to be fingerprinted.

ANSWER: Smith Act [or Alien Registration Act]

8. This author likened the Hegelian ignorance of history to a clueless boy interviewing to be a grocery clerk, who is asked where raisins come from, replying that he gets them from a different grocery store. He stated that the educated man will see himself as the Indian ascetic who returns to society and becomes addicted to wine, in a book defining the title concept as "sympathetic antipathy and an antipathetic sympathy" and claiming that its first example was Adam choosing to eat from the tree of knowledge. This author wrote that if man had no consciousness, then life would be as empty as leaves changing with the seasons, at the start of a "panegyric" in a book whose (*) "Problema III" section contains a series of discussions about Amor seducing Psyche and the Merman's abortive seduction of Agnes. In the "Preliminary Expectoration" of that book by him, the story of Abraham's sacrifice of Isaac allows the author to draw a distinction between the knights of faith and infinite resignation. For 10 points, name this philosopher of *The Concept of Anxiety* and *Fear and Trembling*.

ANSWER: Soren Kierkegaard [or Soren Aabye Kierkegaard; or Johannes de Silentio; or Victor Eremita; or William Afham; or Frater Taciturnus; or Constantin Constantius; or Vigilius Haufniensis; or Nicolaus Notabene; or A.B.C.D.E.F. Godthaab; or A.B.C.D.E.F. Rosenblad; or Inter et Inter; or Procul; or Captain Scipio; or Judge William; or A.F.; or Hilarius Bookbinder; or Johannes Climacus; or H.H.; or Anti-Climacus; prompt on A; prompt on B]

9. The base of some of these cells is held in a cup-shaped depression by Deiters cells. They're not in the kidney, but aminoglycosides, and loop diuretics such as furosemide, are toxic to these cells, some of which express the motor protein prestin on their plasma membranes. Patches of these cells known as maculae exist

in the saccule and utricle. The age-related degeneration of these cells is termed presbycusis. Tip links connect a unique feature of these cells to the kinocilium. These cells repolarize when stretch-sensitive channels open, allowing K^+ ions to escape, and depolarize when their stereocilia deflect, causing positive ions to pour in from the (*) endolymph. Cranial nerve VIII receives input from these cells in the cristae of the semicircular canals. One inner row and three outer rows of these cells make up the basilar membrane inside the Organ of Corti, where they detect changes in air pressure. For 10 points, name these cells that serve as sensory receptors for the vestibular and auditory systems in the ear.

ANSWER: hair cells

10. Several youths in this story spread a rumor that the main character's good fortune owes to his propitiation of Reynard the Fox. A minor character in this story gains the strength to rip out the horn from a live deer by consuming human flesh. A mischievous young boy pursues a tangerine-thieving animal with a switch early in this story. An effeminate boy in this story avoids sustaining a second serious wound from a horned owl, by inadvertently knocking over a jar containing a snake, which attacks the bird. The protagonist of this story stares intently at a pile of rotting corpses to complete his "Five Phases of the Transmigration of the Soul," and hangs himself despite winning the approval of his mortal enemy, the Abbot of (*) Yokawa. The ugly protagonist of this story witnesses the burning of a falling nobleman's carriage, but fails to realize that his own daughter Yuzuki is inside with her monkey. For 10 points, name this Akutagawa story in which the Lord of Horikawa helps the artist Yoshihide to enact horrific scenes in his quest to paint the Buddhist underworld.

ANSWER: "Hell Screen" [or "Jigokuhen"]

11. Correlation functions between an odd number of terms vanish in this theory according to Furry's theorem. The Z_1 and Z_2 renormalization factors are equal to all orders of this theory, which accurately describes Bhabha scattering. The inner product of an on-shell four-momentum with a scattering amplitude equals zero according to the Ward identity in this theory. Trace identities are very useful for manipulating the (*) gamma matrices that appear in this theory. This $U(1)$ abelian gauge theory expands problems perturbatively in powers of the fine structure constant, which is also the coupling constant for the interaction it describes. This theory can be used to compute the Klein-Nishina formula for the Compton scattering cross section, and its extremely accurate predictions won the Nobel Prize for Feynman, Schwinger, and Tomonaga. For 10 points, name this quantum field theory that describes the fundamental force mediated by photons.

ANSWER: quantum electrodynamics [or QED; prompt on quantum field theory]

12. This author wrote an essay linking the deaths of Jesus and Socrates through a common bird that figures in the last moments of each man. This author envisioned a "secondary city," where all external discourse about art and culture is forbidden, to suggest that the best art criticism is to be found in other works of art. This author claimed that philosophical texts such as Hegel's *Phenomenology of Mind* and Kierkegaard's *Either/Or* must be interpreted in relation to a certain Greek play, whose protagonist he calls the "Antitheos" for (*) her just crime against Creon. This critic's inaugural book, which he pointedly called "An Essay in the Old Criticism," examines the differences between two giants of Russian literature. This author of *Antigones* and *Tolstoy or Dostoevsky* expanded his introduction to *The Penguin Book of Modern Verse Translation* into a full book-length study arguing that all human communication, within or across languages, is a form of translation. For 10 points, name this French-born Jewish-American literary critic who wrote *After Babel*.

ANSWER: George Steiner [or Francis George Steiner]

13. This legislation accompanied two other, similar acts authored by Francis Jeffrey and Henry Cockburn. Nottingham Castle was burned down by an angry mob because its resident, the Duke of Newcastle, opposed this legislation. When told that horses wouldn't be fast enough to take him where this legislation was being debated, the king replied "then I will go in a hackney cab!" Thomas Attwood gathered immense support for this piece of legislation by forming the Birmingham Political Union. An attempt to block this piece of legislation sparked a political crisis known as the (*) Days of May. Sydney Smith wrote that "Never was any administration so completely and so suddenly destroyed," as was the ministry of the Duke of Wellington after he gave a speech opposing efforts to bring about this legislation, which was passed under the tenure of Earl Grey. This legislation was the first major attempt to eliminate pocket and rotten boroughs. For 10 points, name this 1832 legislation which corrected injustices in the process of selecting members of parliament.

ANSWER: Great Reform Act [or First Reform Act; or Reform Act of 1832; or Representation of the People Act 1832; accept just Reform Act after "1832" is read; prompt on it before]

14. A trombone quartet alternates playing with a string quartet in the "Prelude" and "Postlude" of a composition this man wrote late in his career in memory of a dead author. This non-Beethoven composer incorporated variations in the form of a march, a waltz, a cancan, and a fugato in 5/8 time, in the second movement of his *Octet*, scored only for brass and woodwind instruments. An extended chorale composed in memory of the deceased Claude Debussy concludes this composer's one-movement (*) *Symphonies of Wind Instruments*. The horn plays a glissando at the start of the "Finale" replete with passages in 7/4 time in a suite by this composer, which follows a bassoon-introduced "Berceuse." Two clarinets play the first instance of a recurring dissonant C major and F sharp major "chord" in a composition by this man which begins at the Shrovetide Fair. This composer called for a bassoon solo in a very high register at the start of a ballet with a riotous 1913 premiere. For 10 points, name this Russian composer of *The Rite of Spring*.

ANSWER: Igor Stravinsky [or Igor Fyodorovich Stravinsky]

15. A leader of this organization served as an ambassador for Rudolf II, forging alliances with Spain and the Catholic League. St. Bonaventure Monastery in Detroit was the site of a famous soup kitchen run during the Great Depression by an esteemed American member of this order, Solanus Casey. This order faced a setback early in its existence when Bernardino Ochino, its third Vicar-General, fled to Switzerland to join the Calvinist fold. On behalf of his brother, Antonio Barberini, who was a member of this order, Pope Urban VIII established a church home to a massive (*) ossuary containing the bones of nearly four thousand members of this order. A member of this order who bore stigmata for most of his life was named Padre Pio. This order was founded in 1525 by Matteo da Bascio, who believed that monks strayed too far from the example set by St. Francis of Assisi, urging them to wear a simpler outfit. For 10 points, name this offshoot of the Franciscan order consisting of friars who wear a distinctive brown habit.

ANSWER: Capuchins [or Order of Capuchin Friars Minor; or Ordo Fratrum Minorum Capuccinorum; or O.F.M.Cap.; prompt on Franciscans before "Francis" is mentioned]

16. Two answers required. In a famous confrontation between these two men, one repeatedly shouts "THOSE EYES!" at the other and quietly mentions the word "lust." After another confrontation between the two of them in 1990, Buster Douglas punched out one of them. These two men first collaborated when one saved the other from a guitar-wielding Elvis impersonator and two guys dressed in pink working for Jimmy Hart. One teamed with the fictional character "Zeus" to attack the other at a confrontation explicitly plugging the film *No Holds Barred*. In 1996, one of these men shockingly revealed himself to be the third member of the (*) New World Order when he hit multiple Atomic Leg Drops on the other at Bash at the Beach. These two men formed the tag team known as the Mega Powers, which collapsed after one became jealous at the attention the other was giving manager Miss Elizabeth. For 10 points, name this duo of professional wrestlers, one known as the "Macho Man" and the other taking his nickname from an "Incredible" Marvel Comics character.

ANSWER: Randy Savage and Hulk Hogan [accept Macho Man for "Savage" until mentioned; accept Randy Poffo for "Savage" or Terry Bollea for "Hogan"]

17. In 1989, Edward Harrison published the definitive history of interpretations and solutions to this problem, whose explication is something of a personal crusade for Paul Wesson. Carl Charlier proposed a solution to this problem that works if the universe has fractal order with dimension less than two. The redshift due to the expansion of the universe adds a factor of $1/r$ that partially resolves this problem but leaves a logarithmic divergence. The r -squared contribution of each shell in this problem is precisely canceled by the one-over- r -squared dropoff in (*) luminosity, so canonical solutions appeal to a finite size or age of the universe to limit the observable region. The naive statement of this problem argues that any line of sight from Earth will eventually reach a star. For 10 points, name this paradox that asks why, if there are so many stars in the universe, the sky is dark at night.

ANSWER: Olbers' paradox

18. This man has animalistic sex in a field of "pansies, and violets, and asphodel, and hyacinth," before falling into "grosser sleep bred of unkindly fumes, with conscious dreams." This man rejects an offer of suicide, saying that it "will not exempt us from the pain we are by doom to pay." This character infers that other planets than Earth also orbit the Sun, but his conversation partner declares celestial motion a pointless thing

to talk about and changes the subject. This character misinterprets the vision of men and women dancing, playing games, and courting, and is horrified to witness one man (*) kill another during sacrifices, after being taken to a tall place where he can see an entire hemisphere at once. Raphael tells this man about the War in Heaven, whereas Michael shows him future events, such as the construction of the Tower of Babel and the crucifixion of Jesus, before escorting him with a flaming sword out of the Garden of Eden. For 10 points, name this character from *Paradise Lost*, the husband of Eve.

ANSWER: Adam

19. A woman from this group assigned several of its members aliases taken from *Moby Dick* character names. This group staged a "book deal" consisting of a sham interview at a library attended by two women bringing suitcases stocked with pistols. A GSG9 raid in Mogadishu freed 86 passengers of a plane hijacked by men attempting to negotiate the release of members of this group. This group, which was fond of driving around in stolen luxury cars, staged a successful siege of an embassy in Stockholm. On the "death night," three of this group's leaders committed suicide in (*) Stammheim Prison, which was specifically designed to house them. A cognitive bias in which a thing that has come to one's attention seems to frequently appear afterwards is named after this group. This group arose due to anger at ex-Nazis still in positions of power, and was co-founded by Gudrun Ennslin alongside its male and female namesakes. For 10 points, name this radical leftist terrorist organization from West Germany.

ANSWER: Baader-Meinhof Gang [or Red Army Faction; or Rote Armee Fraktion; or RAF]

20. This region was home to an artist who signed many cabinet paintings with a pair of glasses, punning on his name. A dog sniffs at some broken tiles and Balthazar, who was painted using one of the first black models in art, presents the infant Jesus with a gift, in *The Adoration of the Kings*, painted by another artist from this region. Yet another artist from this region included two men using waffles as ante in a dice game in a painting whose most prominent character is a man wearing a meat pie as a helmet, carrying a skewered suckling pig as a lance, and riding a (*) barrel as a horse. That artist from this region used the Roman Coliseum as the model for his painting of a monument to human arrogance, titled *The Tower of Babel*, and showed a farmer continuing to plow, unaware of a youth's plunge into the sea in his best-known painting. For 10 points, name this Northern European region whose Renaissance was headed by painters such as Jan Gossaert and Pieter Breughel the Elder.

ANSWER: Flanders [or Flemish; or Southern Netherlands; prompt on Low Countries; prompt on Netherlands; prompt on Dutch Republic; prompt on Northern Europe; prompt on United Provinces; prompt on Belgium]

TB. The Malasherbes commission was set up to determine the political rights of this group. A member of this group recognized Symon Petliura in a photograph with Jozef Pilsudski and shot him several times, leading to an infamous 1927 trial. During his siege of Acre, Napoleon was said to have issued a statement rallying these people, though he would later screw them over with the Infamous Decree. The Cremieux decree secured citizenship for these people in colonial Algeria. In his *Trifles for a Massacre*, Louis-Ferdinand (*) Celine endlessly criticized these people, filling the void left after Edouard Drumont shut down his periodical *La Libre Parole*. The first socialist member of this group to serve as Prime Minister of France was Leon Blum. Ferdinand Esterhazy was the actual culprit of an act of treason attributed to one of these people, who was imprisoned on Devil's Island and defended by Emile Zola in his pamphlet *J'accuse*. For 10 points, name this religious group which faced persecution in France during the Dreyfus Affair.

ANSWER: French Jews

BONUSES

1. Though the effects of this paradox can be seen semiclassically, its resolution can only be justified by quantum indistinguishability. For 10 points each:

[10] Name this paradox from statistical mechanics, in which mixing together two samples of identical gases appears to increase their total entropy.

ANSWER: Gibbs paradox

[10] The Gibbs paradox is a problem because we expect entropy to be this type of variable. The values of these variables are proportional to the size of the system they describe, unlike intensive variables.

ANSWER: **extensive** variables

[10] Given a system with N particles, the Gibbs paradox can be resolved by dividing the classically-derived number of microstates by this value.

ANSWER: **N-factorial**

2. Prostitutes and terrorists occupy separate floors in one of these locations, where a lesbian in a bear suit seduces Franny. For 10 points each:

[10] Identify these title places from a 1981 novel, two of which are, strangely enough, located in Prague and New York City. The quarterback Chipper Dove rapes Franny in the first of these places, an abandoned girls' schoolhouse.

ANSWER: **Hotel New Hampshire** [or **Hotels New Hampshire**; prompt on **hotels**]

[10] This American author wrote about Vienna, wrestling, bears, and catastrophic travel accidents in both *The Hotel New Hampshire* and *The World According to Garp*.

ANSWER: John **Irving**

[10] In *The Hotel New Hampshire*, Franny ultimately copes with her rape by performing this action, a particularly serious form of which involving Van Veen happens in Ardis Hall and dominates the tortuous plot of Nabokov's *Invitation to a Beheading*.

ANSWER: **incest** [or an **incestuous** relationship; prompt on having **sex** or having an **affair** or similar answers]

3. This man's last words included "Blood! Blood! I must have more blood!," because he died in the midst of ordering executions of the defenders at the siege of Limerick. For 10 points each:

[10] Name this Parliamentarian who led a cavalry charge at the Battle of Edgehill, presented a plan for constitutional monarchy known as the Heads of the Proposals, and was appointed Lord Deputy of Ireland after signing Charles I's death warrant.

ANSWER: Henry **Ireton**

[10] Ireton was the son-in-law of this man, the co-commander in chief of the New Model Army with Thomas Fairfax, and Lord Protector of England from 1653-58.

ANSWER: Oliver **Cromwell**

[10] Ireton fell ill in 1651-52 during a nine-month siege of this city, the last to be held by Irish Catholic forces during the Eleven Years' War.

ANSWER: **Galway** [or **Gaillimh**]

4. Alongside its obvious Biblical source, this composition is based on a drama composed by the Scottish historian George Buchanan. For 10 points each:

[10] Name this piece which includes the aria *Deeper and deeper still*, and the recitative *Waft her, angels, thro' the skies*, the final oratorio by its composer.

ANSWER: **Jephtha** [or **HWV 70**]

[10] This composer of *Jephtha* included a pastoral *pifa* interlude, the tenor aria *Ev'ry valley shall be exalted*, and the "Hallelujah Chorus" in his oratorio *The Messiah*.

ANSWER: George Friedrich **Handel**

[10] Another of Handel's Judges-based oratorios, *Deborah*, is thematically similar to this set of pieces by the composer. One of them commemorates the deceased Queen Caroline, and three of them titled *The King Shall Rejoice*, *My Heart is Inditing*, and *Let thy Hand be Strengthened* were composed for a 1727 event.

ANSWER: **anthems** [accept specific types, like **funerary anthems** and **coronation anthems**]

5. This book defines "laetitia," translated as either joy or pleasure, as the greater capacity for action, and it claims that God is either "naturing Nature" or "natured Nature." For 10 points each:

[10] Name this highly axiomatic treatise by Spinoza, which ends with the contrasting sections "Of Human Bondage" and "Of Human Freedom," and, despite its title, covers more than just the philosophy of right and wrong moral conduct.

ANSWER: **Ethics** [or **Ethics**, *Demonstrated in Geometrical Order*; or **Ethica**, *ordine geometrico demonstrata*]

[10] In his *Ethics*, Spinoza contradicted Descartes's theories and put forth a form of this philosophical view by claiming that all substances stem from God. This view says that all existing things can be explained as emanations of one substance, and comes in idealist, material, or neutral types depending on whether that thing is the mind, the physical, or neither.

ANSWER: **monism** [accept word forms]

[10] Spinoza is often considered a proponent of pantheism, a term first used by this Irish writer. This consummate blasphemer claimed in various works that Judaism, Islam, and Christianity were the "three impostors," that the Jews were of Egyptian origin, that the New Testament wasn't authentic, and that human reason is all that is needed to understand Biblical doctrine, making Spinoza seem like Steve Harvey with his weak business about the Old Testament.

ANSWER: John Toland

6. Division rules in the fair pie-cutting problem are called "truthful" if reporting the true value functions is this kind of strategy in that rule. For 10 points each:

[10] Name these strategies which are better than other strategies for some sets of opponents' actions, but not all.

ANSWER: weakly dominant strategies [accept word forms; prompt on dominant]

[10] On the other hand, if there is a *strictly* dominant strategy for each player in a two-player game, then there is only one unique equilibrium of this kind, in which each player knows the strategies of the other.

ANSWER: Nash equilibrium

[10] The Nash equilibrium in this game, a variation on the Keynesian beauty contest developed by a French magazine editor, can be found by iterated elimination of weakly-dominant strategies, such as picking more than 66.67.

ANSWER: guess 2/3 of the average [accept many descriptive equivalents]

7. If a Hausdorff space has this property locally, it can be imparted globally by adding a single point. For 10 points each:

[10] Name this property of topological spaces. It is intuitively equivalent to being closed and bounded, and means precisely that in Euclidean spaces according to the Heine-Borel theorem.

ANSWER: compactness

[10] Another definition of a compact space states that for any covering of the space with open sets, one can choose a subcover that has this property.

ANSWER: it is finite

[10] This method for compactifying a topological space X gives a compact space usually written " βX ." It is useful because continuous functions on X lift uniquely to continuous functions on βX .

ANSWER: Stone-Cech (stone-chek) compactification

8. A poem of this type by this author urges critics to not "scorn" the "key" with which "Shakespeare unlock'd his heart," and the "small lute" which "gave ease to Petrarch's wound." For 10 points each:

[10] Name these fourteen-line poems, such as "Mutability" and "Composed upon Westminster Bridge, September 3, 1802," written by a Romantic author. The best-known one begins "The world is too much with us; late and soon, getting and spending, we lay waste our powers."

ANSWER: sonnets by William Wordsworth

[10] Wordsworth's sonnet "London, 1802" asks this man to return and give us "manners, virtue, freedom, power," shouting "Thou should'st be living at this hour!"

ANSWER: John Milton

[10] A walk taken on the beach in Calais with his sister Dorothy and his daughter Caroline Vallon impelled Wordsworth to write this sonnet, which tells Caroline "If thou appear untouched by solemn thought, thy nature is not therefore less divine," and that she still "worship'st at the Temple's inner shrine."

ANSWER: "It is a beauteous evening, calm and free"

9. The Catalan Company, a mercenary force loyal to this dynasty, defected after one of its emperors foolishly ordered the assassination of their leader Michael de Flor. For 10 points each:

[10] Name this dynasty which faced the Hesychast controversy and ruled the Byzantine Empire from the 1259 ascension of its founder Michael VIII to the empire's fall in 1453.

ANSWER: Palaeologus [or Palaeologi]

[10] Michael's ascension spelled the end of the Latin state that set up shop in Greece after this 1204 event, in which greedy knights allied with the Venetian doge Enrico Dandolo decided to sack Constantinople rather than liberate the Holy Land.

ANSWER: Fourth Crusade

[10] Andronicus II Palaeologus gave a University of Constantinople appointment to this Italian monk, an early humanist who made it his life's mission to attack Gregory Palamas, the chief Hesychast.

ANSWER: **Barlaam** of Seminara [or **Barlaam** of Calabria; or Bernardo **Massari**]

10. This prophet repeatedly and shamelessly ripped off eighteen chapters' worth of the prophecies of Isaiah, and wore the outfit of Laban after murdering him to take possession of the Plates of Brass. For 10 points each:

[10] Identify this prophet, the son of Lehi, and the namesake leader of a white-skinned tribe that moved to the Americas alongside a splinter group, the Lamanites.

ANSWER: **Nephi**

[10] Four books of Nephi appear in this religious text, which the angel Moroni inscribed in Reformed Egyptian on a pair of golden plates and asked Joseph Smith to translate into English.

ANSWER: Book of **Mormon**

[10] The Book of Mormon describes an "elder" and a "younger" prophet with this name. One of them was cast out for opposing the evil King Noah, and founded the Church of Jesus Christ in the Americas, and the other, the chief Nephite judge, names the book which asks fifty rhetorical questions and compares the world to a seed.

ANSWER: **Alma**

11. This building was the site of armed resistance against the British during the Tomato Incident, and its most famous room contains lights, a couch, and a stereo system that can all be turned off or folded away with a single remote control. For 10 points each:

[10] Identify this location from a children's cartoon, whose immigrant residents include the Vietnamese-born Mr. Hyunh and the selfish Czechoslovakian Oskar Kokoschka.

ANSWER: the boarding **house from Hey Arnold** [or **Sunset Arms**; accept equivalents, such as the **building where Arnold lives**]

[10] This character gets stuck behind the hidden couch in Arnold's room in an episode in which she tries to retrieve her parrot before it can recite her love poem to Arnold. To overcompensate for secretly loving Arnold, she is mean to him and calls him "football head."

ANSWER: **Helga** Pataki [or Helga **Pataki**]

[10] Another boarder at Sunset Arms, Ernie Potts, listens to a song by Dino Spumoni every time that he performs this action at his job. He performs this action with tools such as "Judgment Day" or "The Terminator," and is prevented from doing it for the 500th time by Grandma and Arnold.

ANSWER: **destroying a building** [or **wrecking a building**; or **using a wrecking ball**; accept synonyms]

12. Name these popular ballroom dances, for 10 points each.

[10] The "attack" and the "separation" are moves unique to this dance form of Southern French, whose motions imitate those of bullfighters. Its name literally means "two step."

ANSWER: **paso doble**

[10] Fancy "shine steps," such as the Suzy Q and the Twist, are common in this "grandfather of all swing dances," a derivative of the Charleston which comes in Savoy and G.I. styles. Its name is a nod to the transatlantic flight of a certain aviator.

ANSWER: **Lindy hop**

[10] A minor-key "Finnish" variant exists of this Argentine dance form in 2/4 or 4/4 time, which was Americanized by Rudolph Valentino in his film *The Four Horsemen of the Apocalypse*.

ANSWER: **tango**

13. The Barclay-Butler rule states that there exists a compensation relation between these two quantities. For 10 points each:

[10] Name these two quantities that are plotted against each other in the Mollier diagram. One of them is a conjugate variable of temperature, and the other is given by the internal energy plus the pressure times volume.

ANSWER: **enthalpy** and **entropy** [accept in either order; prompt on either **H** and **S** if given; prompt on partial answer]

[10] This state function can be calculated by subtracting the entropy times temperature from the enthalpy. It is less than zero for spontaneous reactions.

ANSWER: **Gibbs free energy** [prompt on partial; prompt on **G**]

[10] In the "wet" region of an enthalpy-entropy chart for an evaporation reaction, lines are drawn representing when this quantity is constant. This quantity, which is an indicator of steam quality, is expressed as the mass of steam over the sum of the mass of steam and the mass of water.

ANSWER: dryness fraction

14. "W. B. Yeats's poem ""When You Are Old"" is an adaptation of a poem from this collection beginning ""When you are very old, at evening, by the fire, spinning wool by candlelight and winding it in skeins."" For 10 points each: [10] Name this collection of approximately 130 poems, including one beginning ""My fever still grows, yours diminishes,"" written to console a widowed lady from the court of Catherine de Medici.

ANSWER: Sonnets pour Helene [or Sonnets for Helen]

[10] This French ""prince of poets"" wrote the *Sonnets pour Helene*, and was by far the most prolific member of La Pleiade, outstripping the output of Jean-Antoine de Baif and Joachim Du Bellay.

ANSWER: Pierre de Ronsard

[10] Ronsard's other major collection is made up of these poems, consisting of a strophe, an antistrophe, and an epode, styled after a famous set of lyric ones by Horace.

ANSWER: odes"

15. Rudyard Kipling's poem "If--" is dedicated to this man, who was named "Leander Starr" after the American traveler who rescued his father from drowning. For 10 points each:

[10] Name this man who failed to rouse up the Uitlanders in revolt in the Transvaal Republic during his namesake 1895 "raid," a major precipitating cause of the Second Boer War.

ANSWER: Leander Starr Jameson [or The Rt. Hon. Sir Leander Starr Jameson, 1st Baronet; prompt on Doctor Jim; prompt on Lenner]

[10] Jameson's mercenaries were aided by policemen from this British protectorate, which in 1966 gained independence and became the modern country Botswana.

ANSWER: Bechuanaland

[10] As Administrator of Mashonaland, Jameson's weak diplomatic skills led to the breakout of the First Matabele War, during which this legendary squad of thirty-four men, named either for their leader or the place where they made their stand, took out 3000 Matabele soldiers before being slaughtered to a man, in what is considered the African version of the Alamo.

ANSWER: Shangani Patrol [or Wilson's Patrol]

16. Name these beings that occupy roles in American Indian mythology that aren't trickster, for 10 points each.

[10] Numerous American Indian tribes believe that a giant example of these animals carries the world upon its shell.

ANSWER: turtle [or tortoise]

[10] The Pueblo and Hopi people believe that a benevolent "woman" or "grandmother" with this animal form created the Earth and the stars using an object laced with dew. The Choctaw also credit her with stealing fire for humans.

ANSWER: spider

[10] In Pawnee mythology, a goddess in this role instructs her priests to shake their rattles, creating the oceans and the terrestrial features of the world.

ANSWER: Evening Star [or Venus; do not accept or prompt on "goddess of love"]

17. Three years after this decision, its co-defendant Howard A. Guilford was shot and killed by mobsters. For 10 points each:

[10] Identify this 1931 decision which held that an anti-Catholic, anti-Semitic, anti-union, and anti-black publisher of *The Saturday Press* could not be targeted by a state public nuisance law.

ANSWER: Near v. *Minnesota* [accept either order, but they need the Near part]

[10] *Near v. Minnesota* was a precedent to two cases involving this newspaper. In one, the Nixon administration tried to get this newspaper to suspend publication of the Pentagon Papers, and in the other, Montgomery Public Safety commissioner L.B. Sullivan sued it for running the ad "Heed Their Rising Voices."

ANSWER: *The* New York Times

[10] Guilford may have been whacked by this Romanian-born Jewish mobster, essentially the Al Capone of Minnesota, who also ordered the murder of reporter Walter Liggett. This man received his nickname either from a boxing match or from his habit of locking himself in the outhouse during gang fights as a kid.

ANSWER: **Kid Cann** [or Isadore **Blumenfeld**]

18. This city is home to an unusually crowded Madonna in which an angel holds a jar of ointment and Mary Magdalen creepily plays with the thighs of the infant Christ, who approves St. Jerome's translation of the Bible. For 10 points each:

[10] Name this city whose cathedral's dome is decorated with a rendition of the *Assumption of the Virgin* by Correggio, in which throngs of angels and clouds swirl up to the very top. An artist who was born in and nicknamed for this city set the Mystical Marriage of St. Catherine in a fake niche in his *Bardi Altarpiece*.

ANSWER: **Parma**

[10] Parmigianino is best known for a painting in which a Madonna with this exaggerated physical feature rests her foot on stacked green and red pillows.

ANSWER: **long neck** [or **colla lungo**; not sure what else you could really say, but accept equivalents]

[10] This sworn enemy of Domenichino, almost certainly the third most famous Parmesan painter, created frescoes depicting the life of Old Testament Joseph, and paid homage to Correggio with a spiraling *Assumption of the Virgin* of his own for the cupola of Sant'Andrea della Valle in Rome.

ANSWER: Giovanni **Lanfranco**

19. Heterophile antibodies are detected by the agglutination of sheep and horse red blood cells in this disease's namesake "spot test." For 10 points each:

[10] Identify this disease caused by the Epstein-Barr virus, which can so easily be transmitted orally that it's often called the "kissing disease."

ANSWER: infectious **mononucleosis** [or **glandular fever**; or **Pfeiffer's** disease; or **Filatov's** disease]

[10] In mono, the Epstein-Barr virus first replicates in the epithelial cells of this structure, which develops from namesake "arches" in the embryo. In fish, these structures often contain an additional set of "jaws."

ANSWER: **pharynx** [or **pharyngeal**]

[10] In a minority of cases, mono might be caused by this other herpesvirus, usually present in immunocompromised adults, which along with toxoplasmosis, rubella, and herpes simplex-2, can cause congenital defects after being transferred from mother to embryo. It results in owl eyes.

ANSWER: human **cytomegalovirus** [or **HCMV**; or human **herpesvirus-5**; or **HHV-5**]

20. To ease children into accepting death, Janusz Korczak put on a Warsaw Ghetto adaptation of this play, which Andre Gide read over the radio the night before Paris fell to the Nazis. For 10 points each:

[10] Name this 1912 play, in which the Village Headman's taunts come true, and the King really does visit the terminally ill, but imaginative child Amal, who is fascinated by the title mundane edifice.

ANSWER: *The* **Post Office** [or **Dak Ghar**]

[10] *The Post Office* and *Red Oleanders* are plays by this Bengali author, who wrote the poetry and song collection *Gitanjali*, as well as the national anthems of both India and Bangladesh.

ANSWER: Rabindranath **Tagore** [or **Gurudev**]

[10] This author wrote the prefaces to Tagore's *The Post Office* and *Gitanjali*, and his own plays include a blank verse drama about the Faustian bargain made by *The Countess Cathleen*.

ANSWER: W. B. **Yeats** [or William Butler **Yeats**]

TB. The foot of a statue in this building possibly by Arnolfo di Cambio has been worn away over the years because visitors wouldn't stop kissing it. For 10 points each:

[10] Name this gigantic church in Vatican City, designed over a century by an ensemble cast including Michelangelo and Bernini, the latter of whom sculpted its Baldacchino.

ANSWER: St. **Peter's** Basilica [or Basilica Sancti **Petri**; or Basilica di San **Pietro** in Vaticano]

[10] This Swiss-Italian architect designed the facades of Santa Susanna, Sant'Andrea della Valle, and St. Peter's Basilica, and also extended the nave of the latter church.

ANSWER: Carlo **Maderno**

[10] Maderno purposefully tilted the nave of St. Peter's to correct for this earlier design flaw introduced by Domenico Fontana.

ANSWER: setting the Vatican **Obelisk off-center** [or anything suggesting the **Obelisk was misaligned**]

