

1. The title character of one of this man's novels survives an attack after two assailants trip on a Rubik's Cube and keeps the No Argument Book with his long-time friend Mr. Pinto. Before the climactic scene in that same novel by this author, "Communist Auntie" Mrs. Regu is tasked with looking after the mentally handicapped Ramu. That most recent novel centers on the sale of the flats in Vishram Society Tower A to the builder Dharmen Shah. In his best known novel, the protagonist escapes from "The Darkness", works as a chauffeur for a man married to Pinky Madam, and ultimately murders his employer, as revealed in letters he writes to the Chinese Premier. This man wrote Last Man in Tower. For 10 points, name this Booker-winning Indian author of The White Tiger.
ANSWER: Aravind Adiga
2. One form of spectroscopy based on this effect uses a cylindrical mirror analyzer to catch deflected particles. Kapteyn et. al used a laser to photoionize Xenon in an experiment that studied a decay relevant to this process. One example of the notation used to describe this effect is "K L sub 1 L sub 2 comma 3". The fluoresence yield can be plotted against energy level to determine the likelihood of this effect. When this effect occurs within the same shell, it is called a Coster-Kronig transition. The opposite of this effect occurs in semiconductors and is called impact ionization. Discovered by Meitner, for 10 points, name this effect in which the transition of an electron to an inner orbital causes the expulsion of a different electron.
ANSWER: Auger effect
245-14-67-14102
3. Jacob Baradeus, a follower of this doctrine, ordained many followers of this doctrine as priests in Edessa. Peter Mongas became a supporter of this heresy late in life and the Tome of Leo addressed this heresy. Apollinaris of Alexandria is believed to have started this heresy in response to the growth of Nestorianism. The Coptic Church broke off from the rest of the Church after being accused of following this heresy whose foremost proponent was Eutyches. This heresy was denounced that the Council of Chalcedon. For ten points, name this heresy that claimed that, after the Incarnation, Jesus had one nature, as opposed to the Catholic belief that Jesus was both human and divine.
ANSWER: Monophysitism [accept Miaphysitism]
250-14-67-14103
4. An early painting by this artist shows the four title Mountain Giants gathered around a cauldron, and two cat-like creatures grin at a Hopi doll in his Exotic Figures II. The last of his "audacious stupidities" features a native woman in a translucent skirt dancing on stage and was inspired by a trip to New Guinea. An African woman with a baby on her back greets a man wearing a red mask in his The Missionary. He depicted a bearded man with downcast eyes in his black and white woodcut Prophet. Thomas bends over to inspect Jesus' wounds in the bottom-left scene from a nine-panel religious work. A group of nude women gesticulate wildly in front of an idol in his painting Dance Around the Golden Calf. For 10 points, name this one-time Die Brucke member who made The Life of Christ.
ANSWER: Emil Nolde [or Emil Hansen]
5. A didactic poem by this author instructs readers to "make haste and bake pale lupins and windy beans. Of these take six pounds each and grind the whole in the mill." This man suggested burning letters and used the voice of a doctor in a poem about how to avoid suicide while exiting a love affair. This author made it through June in a poem cycle presented as interviews with the various gods about the origins of holidays. This man provides a long recounting of how Mestra was sold into slavery and Erysciththon was cursed with unrelenting hunger in a poem that ends with Julius Caesar turning into a star. For 10 points, name this author of the Fasti and the Metamorphoses.
ANSWER: Publius Ovidius Naso
019-14-67-14105
6. In Gian-Carlo Menotti's Help, Help, the Globolinks!, a Globolink destroys one of these objects that Emily had been using to ward them off. The title character of Ernst Krenek's Jonny Spielt Auf steals one of these objects from Daniello. An Englishman hires Schaunard to kill a parrot using one of these devices in La Bohème. The soldier in Igor Stravinsky's L'Histoire du Soldat trades one of these devices to the devil for a book that will predict the economy. One theme later taken up by this instrument was first hummed by Anna Bussotti, whose blood was mixed into its varnish in a film scored by John Corigliano whose solos were played by Joshua Bell. For 10 points, name this instrument which represents death in a scordatura solo that begins Danse Macabre.
ANSWER: violin [or fiddle]
237-14-67-14106
7. This country was the site of a July 2014 interfaith conference between imam Hassen Chalghoumi and its chief rabbi, Haim Korsia, following an incident where the banned Jewish militant group LDJ clashed with Muslim rioters outside the Yitzhak Abarbanel synagogue. Following a July 2014 pogrom in which Jewish businesses were destroyed in this country, a mayor here denounced a "horde of savages" and this country's interior minister announced a widely ignored ban on anti-Israel protest marches. This country's citizen Nicolas Anelka provoked controversy in 2013 when he made a neo-Nazi gesture popularized by this country's wildly popular Holocaust denier Dieudonné M'bala M'bala. The "Little Jerusalem" suburb of this country's capital was attacked in July 2014 by a mob chanting "Death to Jews" in an event condemned by this country's prime minister, Manuel Valls. For 10 points, name this country where Algerian immigrants and native supporters of Marine le Pen come together to hate Jews in cities such as Marseilles.
ANSWER: France
019-14-67-14107
8. The corpses of the crocodile victims Moss and Orchard were found at the second gorge of this natural feature, known as the Boiling Pot, following a 1910 hippo attack on their canoe. This feature's recession is expanding the Batoka Gorges. A small rock barrier within the Armchair section of this feature forms the treacherous Devil's Pool. Mosi-oa-Tunya National Park comprises the land on one side of this feature, which was bridged by the Cape to Cairo railway at the insistence of Cecil Rhodes. This feature is overlooked by a bronze statue of David Livingstone. For 10 points, name this site at which the Zambezi River becomes impassable to ships, an enormous waterfall found between Zambia and Zimbabwe. ANSWER: Victoria Falls
9. In this play, a man imitates a hotel's fountain by saying "plop plop plop" until he is interrupted. After answering an unexpected phone call, a character in this play claims that "Madame Duvallon" is unavailable because she has left for Madagascar. In this play, two bedroom doors are blocked with sofas after a fight in which a woman breaks a record over a man's head. In this play, two characters begin humming along with an orchestra while sitting with their backs to each other on a terrace. The code "Solomon Isaacs," or "Sollocks," is used by those characters, who tiptoe offstage while Victor and Sybil argue at the end of this play. For 10 points, name this play by Noel Coward in which the divorced couple Elyot and Amanda encounter each other while honeymooning.
ANSWER: Private Lives
252-14-67-14109
10. This conflict was sparked by the execution of Manuel Antonio Ay. In the years leading up to this conflict, plantations to produce henequen were founded and Santiago Iman launched a rebellion in the same territory. Some participants in it used sharpened sticks called palenquetas and tended to avoid using heavy artillery. Leaders in this conflict included the batabs Jacinto Pat and Cecilio Chi. A breakaway state was created under the rule of the charismatic leader Venancio Puc during this conflict. Some fighters in its later stages were called cruzob or cross people owing to their devotion to the cult of the Speaking Cross and were concentrated at Chan Santa Cruz until finally conquered in 1901. Government forces in this conflict were concentrated in the city of Campeche. For 10 points, name this rebellion between different classes of Mayan society.
ANSWER: Mayan Caste War [or Yucatan Caste War]
094-14-67-14110
11. In 2005 , this compound was used by Imada et. al in the presence of a flavin perchlorate catalyst to hydrogenate olefins. This compound reacts with an imide to form substituted 1,2,4-triazoles in a reaction used to synthesize novel drugs against tuberculosis, the Einhorn-Brunner reaction. This compound can be synthesized via the oxidation of ammonia with hydrogen peroxide in the Atofina-PCUK cycle, or by adding monochloramine to a mixture of sodium hypochlorite and ammonia. More famously, this compound and potassium hydroxide are used to reduce carbonyls to alkanes in a variant of the Clemmensen reduction. For 10 points, name this compound synthesized in the Raschig-Olin process and used in the Wolff-Kishner reaction with chemical formula N 2 H 4 .
ANSWER: hydrazine
245-14-67-14111
12. After breaking a contract with Jerry Leiber and Mike Stoller, this man went on to found a company with Lester Sill. This man made one of his wives sing him "You Came, You Saw, You Conquered" every day while imprisoned inside of his Beverly Hills home. Roger Ebert admitted that the character of Z-Man in Beyond the Valley of the Dolls was based on this man. Helen Mirren played this man's defense attorney in a David Mamet film commissioned by HBO where he was played by Al Pacino in a ridiculous wig. This man cranked up the echo to reduce the tape hiss of overdubs to produce his signature style. He produced Let It Be and most of the work of girl groups like the Ronettes. For 10 points, name this creator of the Wall of Sound, a music producer who murdered Lana Clarkson in 2003.
ANSWER: Phil Spector [or Harvey Phillip Spector]
13. The Abbot Ebolous was singled out for bravery during one of these events. The Great Bridge was attacked during that military campaign in which Seigfried was bought off with 700 pounds of silver to leave Odo's domain. During another of these events, Castor and Pollux, a pair of elephants, were eaten as a zoo was plundered. Microphotography was used by an organization started by Nadar during that event, The Balloon Post. In one of these events, a member of the so-called "Balloon Government", Leon Gambetta, fled in a hot air balloon. That action was led by Helmuth von Moltke and followed the Battle of Sedan. For ten points, name these events, one of which occurred in 885 by Vikings, and another of which followed the capture of Napoleon III, long campaigns in which France's largest city was blockaded.
ANSWER: Siege of Paris [accept Seigfried's Siege of Paris; accept Wilhelm I's Siege of Paris; prompt on Viking Raids; prompt on Viking raids in France]
14. Carl Dahlhaus argued that the use of color in this composer's harmonies was "more of an end than a beginning." Glenn Watkins analyzed a noted chromatic third progression in this composer's music as a juxtaposition of Phrygian cadences. This composer breaks up the word "respiro" with a rest in the beginning of his "Io pur respiro." Igor Stravinsky wrote a ballet about this composer whose third movement arranges his "Belta, poi, che t'assenti." One of his works begins with sustained C-sharp major, A minor, B major, and G major chords. Many of his sacred works, such as settings of "O vos omnes" and "Tristis est anima mea" from Sacrae Cantiones and Tenebrae Responsoria, were likely motivated by atonement for this man's murder of his wife and her lover. For 10 points, name this Italian composer whose six books of five-part madrigals include "Moro, lasso, al mio duolo."
ANSWER: Carlo Gesualdo, Prince of Venosa [or Carlo Gesualdo da Venosa]
15. Images evoked in this poem include "dead baby carriages" and "sphincters of dynamos". Its author was inspired to write it after experiencing an "illumination of eternal Consciousness" when hearing words like the "Sick Rose" from the poetry of William Blake. The "sermon to my soul" which ends this poem employs a string of noun-adjectives like "riverbank sunset Frisco". Its speaker asks the "unholy battered" addressee, "How many flies buzzed round you innocent of your grime?" This poem's title object sits "dry on top of a pile of ancient sawdust", and the speaker asks "when did you look at your skin and decide you were an impotent dirty old locomotive?" It opens with the speaker sitting beside Jack Kerouac. For 10 points, identify this Allen Ginsberg poem about a plant.

## ANSWER: "Sunflower Sutra"

094-14-67-14115
16. The Columbia line of this organism is derived from the Landsberg population and is particularly fertile. This organism contains two genes that code for a zinc finger necessary for the proper development of tissue boundaries. Those almost identical genes are named clark kent and SUPERMAN. This autogamous organism has a genome with only five chromosomes. Ti plasmids are transformed into this organism by Agrobacterium tumefaciens, allowing for the study of T-DNA mutagenesis. Research into this organism's genome elucidated the ABC model of angiosperm development. Studied by Friedrich Laibach, for 10 points, name this member of the mustard family, a model plant organism also known as the thale cress.

17. Before a battle, one leader of this group attempted to find a red haired person to sacrifice, but had to settle for a red horse. A statue of a lion was built over a spot where many members of this group are believed to have been killed by an army wielding Sarissa pikes. Initially known as the city regiment, Pelopidas led this group that was formed by Gorgidas. This group was unusually put on the left side of an army during a battle in which Cleombrotus's army was destroyed by Epaminondas. That was the Battle of Leuctra. For ten points, name this group of Theban warriors, a force of 300 soldiers who supposedly were lovers as well as fighters.
ANSWER: Sacred Band [accept City Regiment before mentioned; prompt on Army of Thebes; prompt on Theban Army]

250-14-67-14117
18. People undergoing these proceedings can be ranked on a scale named for Gudjonsson. Saul Kassin pointed out the problems with a standard method for conducting these proceedings in an experiment involving whether a computer's Alt key was hit or not. Popular approaches for these proceedings include those developed by John Reid and "approach combinations" like "pride-and-ego-down" recommended by the US Army. Montejo v. Louisiana overturned Michigan v. Jackson which had ruled that these proceedings were invalid after certain Sixth Amendment rights were claimed. Owing to a 1966 case, before undergoing this process people must be read their Miranda Rights. For 10 points, name these proceedings where techniques like "good cop/bad cop" are used to try to extract confessions.
ANSWER: police interrogations [or police questionings; accept extracting confessions and things like that before the end; I suppose prompt on "torture"]

094-14-67-14118
19. A building at the center of this event was briefly held by Robert Register and Sheriff Daniel Shaw against men like ex-Johnson's Island prisoner Christopher Columbus Nash. Some participants in this event were arrested by James Roswell under the Enforcement Act, but their convictions were overturned by Justice Joseph Bradley, riding circuit. It was sparked by a disputed election for governor between Republican William Kellogg and Fusionist John McEnery. The perpetrators of this event were exonerated in Cruikshank v. US. Over 50 black Republicans were massacred after raising a white flag above a courthouse they were defending in this deadliest massacre during Reconstruction. For 10 points, name this 1873 massacre in a Louisiana parish capital named for Grant's first vice president.
ANSWER: Colfax Massacre [or Colfax Riot]
094-14-67-14119
20. This man claimed that the montage form explodes the possibilities of the novel in an essay on Alfred Döblin's Berlin Alexanderplatz. This author of "The Crisis of the Novel" claimed that disunity of memory since World War I has led to the demise of the title art in his study of Nikolai Leskov. He used the term "dialectical image" to denote the fantasy of mixing new and old modes of production in a study of Baudelaire. This author of "The Storyteller" wrote "On Some Motifs in Baudelaire" as part of a work in which he popularized the flâneur as a symptom of alienated city life. This author of "The Task of the Translator" described how media such as film and photography allow cult value to be replaced by exhibition value. For 10 points, name this Frankfurt School philosopher whose Illuminations contain the essay "The Work of Art in the Age of Mechanical Reproduction."
ANSWER: Walter Bendix Schönflies Benjamin
21. Jucys-Murphy elements are used to study this group's representations, which include Specht modules. Jordan's Theorem states that if a primitive subgroup of this group has a cycle of prime length, it is either this group or a specific subgroup of it. The Robinson-Schensted correspondence bijects the elements of this group with Young tableaux, which George Frobenius applied to the study of this group. Any group $G$ is isomorphic to a subgroup of this group acting on $G$ according to Cayley's Theorem. A subgroup of this group comprising only the even elements is called the alternating group, and when this group acts on a set of $n$ elements, it has cardinality $n$ factorial. For 10 points, name this group comprising all the permutations of a set of elements under composition.
ANSWER: symmetric group [or S sub-n]


1. This model attempts to disprove the notion of "banana bonds" in cyclopropane, suggesting that its hybrid orbitals point to the center of the ring. For 10 points each:
[10] Name this model which correctly deduced the hybridization of each carbon atom in cyclopropane. Its namesake diagrams plot an orbital's geometry against its binding energy.
ANSWER: Walsh model [accept Walsh diagram]
[10] This is that aforementioned hybridization for each carbon in a cyclopropane ring. This is also the hybridization of the central atom in a trigonal planar molecule.
ANSWER: sp2 [do not prompt on partial answers like "sp"]
[10] One method of synthesizing cyclopropane derivatives is through this reaction, in which a zinc-copper couple reacts with an alkene to generate the three-membered ring.
ANSWER: Simmons-Smith reaction
245-14-67-14201
2. This study notes that serious novels such as Jane Eyre and Middlemarch had to be published under pseudonyms, while potboilers such as Lady Audley's Secret were socially acceptable. For 10 points each: [10] Name this landmark 1977 study of women's writing, which posits that the feminine, the feminist, and the female are the three stages of women's literary development, and is named in response to a Virginia Woolf essay.
ANSWER: A Literature of Their Own
[10] A Literature of Their Own was a pioneering book in "gynocritics" by this Princeton professor who also wrote the instructional manual Teaching Literature.
ANSWER: Elaine Showalter
[10] Showalter's The Female Malady discusses the diagnosis of this mysterious disease, thought to be caused by a "wandering womb." Showalter controversially posits that modern diagnoses such as depression and Gulf War syndrome are equivalent to this condition, which was pseudoscientifically assigned to women in the nineteenth century.
ANSWER: hysteria
019-14-67-14202
3. This group's members included a young butcher's apprentice named Mejla Hlavsa, and they were found of doing things like sacrificing a live chicken during the playing of "Cosmic Symphony". For 10 points each:
[10] Identify this rock band whose arrest in 1976 partially inspired the issuance of Charter 77.
ANSWER: The Plastic People of the Universe [prompt on "PPU"]
[10] One of the founding members of Charter 77 was this future president of Czechoslovakia who also wrote plays like The Garden Party.
ANSWER: Vaclav Havel
[10] Many of Havel's writings were of this type, which were generally carbon copies of typewritten manuscripts that had been banned by the government. The term for this type of literature comes from the Russian for "self-publishing".
ANSWER: samizdat literature
4. 

This man was succeeded by Celal Beyar in one post, and he returned to that post after the coup of May, 27th. For 10 points each:
[10] Name this president and Prime Minister of Turkey who succeeded Attaturk to become the second Turkish president.
ANSWER: Ismet Inonu [accept Ismet Pasha; Do not accept or prompt on just Ismet]
[10] Inonu famously met with this man in a train car in the Adana Conference. This guy also met with some other world leaders at Yalta and was replaced as the head of state of his country during the Potsdam Conference.
ANSWER: Sir Winston Leonard Spencer Churchill
[10] The 1980 military coup in Turkey was aided by this youth group that still frequently clashes with PKK members. This group committed a bunch of murders while fighting leftist Turks during the 1970s.
ANSWER: Gray Wolves [accept Bozkutrlar; accept Idealist Youth]
5. This man founded the Community of St. John with Adrienne von Speyr, a twice-married Protestant whose mystical experiences impressed this theologian. For 10 points each:
[10] Name this Roman Catholic theologian from Switzerland who explored the resurrection of Christ in Mysterium Paschale and wrote the five-volume Theo-Drama.
ANSWER: Hans Urs von Balthasar
[10] Balthasar was a major expositor of this Neo-Orthodox theologian from Switzerland, best known for his thirteen-volume Church Dogmatics and the commentary The Epistle to the Romans.
ANSWER: Karl Barth
[10] Along with Dietrich Bonhoeffer and others, Barth became a leader in the Confessing Church, which fiercely opposed this regime. Ideologists of this regime, like Alfred Rosenberg, promoted Positive Christianity, which sought to deny Christ's Semitic origin.
ANSWER: Third Reich [accept answers like Nazi Germany]
237-14-67-14205
6. Nelson Goodman proposed that one of these statements is true if and only if it satisfies cotenability and law criteria, though he recognized his own definition was circular. For 10 points each:
[10] Name this kind of description of what would happen in a hypothetical situation. Robert Stalnaker and David K. Lewis both evaluated these statements in terms of similarity relations between possible worlds.
ANSWER: counterfactuals [or counterfactual conditionals]
[10] This doctrine, named after the 16th century Spanish philosopher who formulated it, states that God has "middle knowledge" through which he knows what people would choose to do in any counterfactual situation.
ANSWER: Molinism [or Luis de Molina]
[10] Molinism is an attempt to reconcile divine providence with this ability of people to make choices without being subject to strong constraints. Compatibilists believe that this quality is compatible with determinism.
ANSWER: free will [or free choice]
7. Marie Dobbs published writing of this kind under the pseudonym "another lady," and of the hundreds of published examples of this kind of writing, the closest to an authorized one is by Anna Lefroy, who inherited the original manuscript. For 10 points each:
[10] Identify this kind of fan fiction, which usually explains the meaning of Edward Denham's converation with Clara Brereton and finds a marriage partner for Sidney Parker.
ANSWER: endings to Sanditon
[10] Sanditon was left unfinished at the death of Jane Austen, much like this 1804 novel in which the title family's daughters are pursued by the Osbornes and Tom Musgrave.
ANSWER: The Watsons
[10] In Jane Austen's complete novel Northanger Abbey, this protagonist marries Henry Tilney despite the faux pas of accusing his father of murder for no reason.
ANSWER: Catherine Morland
019-14-67-14207
8. Many of these things were made using tortoise shells and they were plunged into fires to see how they would crack. For 10 points each:
[10] Name these objects used in ancient China that people believed showed the future.
ANSWER: Oracle Bones[or jiagu]
[10] Oracle bones were used heavily in this Chinese dynasty that followed the Xia and had a capital at Yinxu.
ANSWER: Shang Dynasty [accept Yin Dynasty]
[10] This state held much power in the successor to the Shang, the Zhou Dynasty. This state was partitioned into the Han, Zhao and Wei states after the death of its final duke.
ANSWER: Jin [accept Chin; accept Tang]
9. A chapter of this essay argues for the elevation of "Hellenism" over "Hebraism." For 10 points each: [10] Identify this 1869 essay which identifies one title concept as "a pursuit of our total perfection" and the other as the inevitable result of the recent Second Reform Bill, and urges a cultivation of "scientific passion" and "social passion."
ANSWER: "Culture and Anarchy"
[10] "Culture and Anarchy" was a social criticism piece by this author of "The Scholar Gipsy" and "Thyrsis."
ANSWER: Matthew Arnold
[10] This first chapter of "Culture and Anarchy" scolds scientists for not being concerned with beauty, which Arnold identifies as the highest goal of civilization using the title phrase taken from Swift's Battle of the Books.
ANSWER: "Sweetness and Light"
10. Robert Axelrod got hundreds of social scientists to submit computer programs to play an iterated version of this game in two tournaments. For 10 points each:
[10] Name this game in which two players can independently choose to either remain silent of turn the other in. Though cooperation among players is Pareto-optimal, the expected payoff for defection is higher. ANSWER: prisoner's dilemma
[10] Introduced by Anatol Rapoport, this winning strategy in Axelrod's tournaments cooperates in the first move and then does what the other player did the previous move. Axelrod and W. D. Hamilton claim that this strategy is evolutionarily stable in The Evolution of Cooperation.
ANSWER: TIT FOR TAT
[10] Cooperation is a focus of this perspective in international relations theory, whose proponents, including Joseph Nye and Robert Keohane, emphasize the ways that states can minimize the anarchy of inter-state relations.
ANSWER: neoliberalism
237-14-67-14210
11. This man heavily borrowed from the Rococo works of Henry Copland, and the Victoria and Albert museum contains examples of the set of bedroom furniture he made for the Badminton House. For 10 points each:
[10] Identify this furniture maker and author of The Gentleman and Cabinet-Maker's Director. ANSWER: Thomas Chippendale
[10] Thomas Chippendale's "Gothic" furniture of this type included ogee curves on the back of the furniture. Eero Saarinen created a "tulip" one of these things, which was made famous on the set of Star Trek.
ANSWER: chairs
[10] Among Chippendale's clients was this actor, who was depicted between Tragedy and Comedy in a painting by Joshua Reynolds.
ANSWER: David Garrick
12. This group's lead singer wrote "Kurt smells like Teen Spirit", inspiring Kurt Cobain to write his breakout hit. For 10 points each:
[10] Identify this band founded by Kathleen Hanna at Evergreen State College in Olympia, Washington. They recorded tracks like "Lil Red" for their debut full-length, Pussy Whipped.
ANSWER: Bikini Kill
[10] Bikini Kill helped ignite this movement, associated with radical feminist zines and punk rock.
Calamity Jane was another band in this movement.
ANSWER: RioT GrrrL
[10] Kathleen Hanna also appeared dancing and wearing pigtails in a music video by this alt-rock band where vocalist Kim Gordon sang lyrics like, "Ten, twenty, thirty, forty / Tell me that you want to hold me". In the early '90s they released the albums Goo and Dirty.
ANSWER: Sonic Youth
13. Well-run quizbowl tournaments use buzzers. This is a well-run quizbowl tournament, therefore it must have used buzzers. For 10 points each:
[10] Name this argument form which can also be stated as "If Pimplies Q and P is true, then Q must be true". It has a Latin name.

## ANSWER: modus ponens

[10] Modus ponens forms a basis for this type of logic which uses variables as quantifiers, such as "almost all" or "at least one".
ANSWER: $\underline{\text { first-order logic [or predicate logic; accept the word "calculus" in place of logic; prompt on }}$ "quantification theory"]
[10] The process of removing quantifiers from a statement is named for this Norwegian, who also names a theorem with Lowenheim which states that you can always produce a countable model from a countable first-order theory.
ANSWER: Thoralf Albert Skolem
245-14-67-14213
14. In one of these devices, light is first reflected from a primary concave mirror then a secondary convex one in succession, for 10 points each:
[10] Name this configuration which attempts to optimize clarity and magnification through a very long focal length. One variety uses a Schmidt corrector.
ANSWER: Schmidt-Cassegrain reflector [or Schmidt-Cassegrain telescope]
[10] A Schmidt-Cassegrain reflector corrects for this anomaly in which rays passing through the edges of the lens do not converge, causing a distorted image. One way to overcome this problem in general is to change the shape of the lens.

## ANSWER: spherical aberration

[10] The classical Cassegrain reflector uses this shape for its primary mirror. This is the shape given by the equation y equals x squared.
ANSWER: parabola [accept word forms; accept paraboloidal]
245-14-67-14214
15. This branch places special emphasis on fitra, or intuitive recognition of God and virtue, and they try to activate the six latifa as part of their spiritual development. For 10 points each:
[10] Name this mystical branch of Islam whose turuq, or schools, include the Mevlevi Order, whose sama ceremony involves whirling. Al-Ghazali defended it in The Revival of Religious Sciences.
ANSWER: Sufism
[10] This early 13th century author of The Meccan Openings and The Ringstones of the Wisdoms was called the "Great Master" of Sufism. In discussing the role of imagination, he used the concept of barzakh to describe how things simultaneously unite and divide.
ANSWER: Ibn Arabi [or Abu 'Abd Allah Muhammad ibn Ali ibn Muhammad ibn al-Arabi al-Hatimi at-Ta'i]
[10] Unlike other Sufi turuq, the Naqshbandi school traces its teachings back through this first Caliph, a father-in-law of Muhammad.
ANSWER: Abu Bakr [or Abdullah ibn Abi Qhuhafa]
16. In a July 2014 debate, Al Sharpton charged that Dante de Blasio would be subject to this procedure if he were not the mayor's son. For 10 points each:
[10] Identify this illegal police maneuver which the NYPD was caught on film using two times within the span of a week in July 2014, once on pregnant woman Rosan Miller and once on Eric Garner, who died as a result.
ANSWER: a chokehold
[10] Garner was being arrested for this crime, which is common in New York City due to the $\$ 5.85$ in total tax applied when purchasing the same goods in the legally allowable unit.
ANSWER: selling individual cigarettes [or selling untaxed cigarettes or selling loosie cigarettes; prompt on selling cigarettes]
[10] Another NYPD member, Kenneth Moreno, filed a $\$ 175$ million lawsuit in July after his acquittal for this crime, of which he was definitely guilty. A Google bombing campaign seeks to permanently associate this word and "cop" with Moreno's name.
ANSWER: rape
019-14-67-14216
17. This man sadistically forces Ariel to sing a bunch of high Es in an opera that contains the arias "Five fathoms deep" and "Friends don't fear." For 10 points each:
[10] Name that composer of The Tempest and Tevot. The scherzo of his orchestral work Asyla, called "Ecstasio," depicts a drug-fueled night in London clubs.
ANSWER: Thomas Adès
[10] Adès has had a long association with Simon Rattle, who has conducted this orchestra since 2002. Herbert von Karajan conducted it from 1955 to 1989, leading them in recording the complete Beethoven symphonies multiple times.
ANSWER: Berlin Philharmonic Orchestra [or Berliner Philharmoniker]
[10] Adès's professorship at the Royal Academy of Music is named for this composer of the solo oboe work Six Metamorphoses after Ovid and War Requiem.
ANSWER: Benjamin Britten
18. During this period, the cell increases its number of mitochondria and ribosomes to prepare for cell division. For 10 points each:
[10] Name this phase of the cell cycle that occurs after DNA replication. DNA damage can cause cells to be arrested in this stage.
ANSWER: $\underline{\mathbf{G} 2}$ phase [or $\underline{\mathbf{G} 2}$ stage; prompt on "interphase"]
[10] Cells cannot exit the G2 phase to enter mitosis without this protein complex, a heterodimer of CDK1 and cyclin B.
ANSWER: maturation promoting factor [or MPF]
[10] MPF was originally discovered in this allotetraploid organism with a large brood size known for the ease at which its embryo stage can be manipulated for research.
ANSWER: Xenopus laevis [accept Xenopus tropicalis; prompt on "frog"]
19. This man pledged to get his state "rolling again" in a successful campaign against John B. Swainson for governor in 1962. For 10 points each:
[10] Identify this 1968 presidential candidate whose candidacy was sunk after he declared, "I'd just had the greatest brainwashing that anybody can get" after coming back from a trip to Vietnam.
ANSWER: George Wilcken Romney
[10] Romney was governor during the 1967 12th Street riot in this city, which was sparked by a police raid onto a blind pig. During the riot in this city, the National Guard defended Henry Ford hospital from a supposed sniper on the loose.
ANSWER: Detroit
[10] Officially called the National Advisory Commission on Civil Disorders, this panel was headed by a namesake Governor of Illinois and examined the origins of the 1967 Detroit Riot.
ANSWER: Kerner Commission
20. In one play, this character is woodcutter who is a dick to his wife Martine, and in that play he declares that a certain profession, "is the best trade out there ... payment comes whether we kill or cure". For 10 points each:
[10] Identify this title character of The Doctor In Spite of Himself and another play where he is a "self-deceived husband".

## ANSWER: Sganarelle

[10] The Doctor In Spite of Himself was written by this comic playwright, who collapsed on stage playing a character from his play The Imaginary Invalid shortly before dying.
ANSWER: Moliere [or Jean-Baptiste Poquelin]
[10] In this other Moliere play, the title figure is visited by the supposed son of the Sultan of Turkey, who is actually a disguised Cleonte speaking Sabir rather than Turkish.
ANSWER: The Bourgeois Gentleman [or Le Bourgeois gentilhomme or The Middle-Class Aristocrat or The Would-Be Noble]

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21. A version of this move beginning in second position is called à la seconde and is usually done by men. For 10 points each:
[10] Name this ballet move that consists of a turn on one foot while the arms remain immobile. It is usually executed on pointe or demi-pointe, and can be done en dedans or en dehors.
ANSWER: pirouette
[10] This turn is a female counterpart to pirouette à la seconde. It begins with one foot flat and the other leg extended in fourth position front before being whipped to the side and touching the back of the knee of the supporting leg. Pierina Legnani was the first to do 32 in a row.
ANSWER: fouetté rond de jamb en tourant
[10] Peter Tchaikovsky's Swan Lake requires the Black Swan to perform 32 consecutive fouettés en tourant during a celebrated one of these duets between a male and female dancer.
ANSWER: pas de deux

