

2015 George Oppen: Questions courtesy of Anne Hathaway's cow-milking fingers
Written by Auroi Gupta, Stephen Eltinge, and Mike Cheyne
ROUND 8

TOSSUPS

1. A film by this director transitions from a black-and-white shot of the main characters walking down a highway to a colored, long, circulating aerial shot of the Iguazu Falls. Another of his films closes with an epigraph that declares "The past is something he could see, but not touch," following a series of shots through Angkor Wat. In a scene from one of his films, the main couple passes each other repeatedly on the stairs leading down to their favorite noodle shop. In an amazing shot by this director, a blur of people pass in and out of a snack bar while two characters remain still: a (*) cop drinking his coffee, and a short-haired girl whose leitmotif is "California Dreamin." A journalist and a secretary rent adjacent rooms in an apartment and, after learning that their respective spouses are cheating on them, begin an affair of their own, in a film by this director that forms a trilogy with *Days of Being Wild* and *2046*. For 10 points, name this Hong Kong director of *Chungking Express* and *In the Mood for Love*.

ANSWER: Wong Kar-Wai

2. In a novel by this author, just at the point when John Wesley is about to be saved from Native Americans by a cowgirl, a movie theater loses electricity. A woman surrounds herself with a coterie of angel wing-wearing girls who are given names such as Temperance and Chastity, in that novel by him. In a moving scene from a novel by this author, a man who had abandoned his faith to live with his mistress Cara in Venice makes the sign of the cross on his deathbed to return the Catholic fold. The protagonist of another novel by this author gets duped into buying gold ore by the German prospector's wife Katchen, and convinces his uncle to impersonate him at a banquet held by Lord (*) Copper, so that he can retire to a quiet life at Boot Magna. A character from this author's best-known novel breaks a tiny bone in his foot while playing croquet and, well into his adulthood, carries around the teddy bear Aloysius. In that novel by him, Lord Marchmain's son Sebastian Flyte first meets Charles Ryder at Oxford. For 10 points, name this author of *Vile Bodies*, *Scoop*, and *Brideshead Revisited*.

ANSWER: Evelyn Waugh [or Arthur Evelyn St. John Waugh; accept the hell out of He-Evelyn]

3. An unusually large number of people of this ethnicity reside in Sodertalje, Sweden, where they comprise the majority of two major soccer teams. Before weddings in this community, all the women arrive at the bride's house and each woman contributes a few stitches to a massive blanket. This ethnic group celebrates a Halloween-like custom in which masked men armed with wooden swords and shields scare children into fasting, called Somikka. The American missionary Justin Perkins established the standard literary dialect of these peoples' language, known as Urmian. These people amusingly celebrate New Years' on April 1st with a festival called Kha b-Nisan. They celebrate "Martyr's Day" on August 7th to commemorate their systematic targeting in the 1933 (*) Simele massacre. The Armenian and Greek genocides accompanied a genocide of these people, who are also known as the Chaldeans and the Arameans. For 10 points, name this predominantly Syriac Christian ethnic group in the Middle East descended from the Mesopotamian people who had their capital at Nineveh.

ANSWER: Assyrians [or Syriacs; or Chaldeans; or Arameans prior to mention]

4. A woman who married into the royal household of this city demanded that a black girl age between one and a half to four years old, who was "as black as possible," be brought to her. For a century, the Bonacolsi family reigned supreme in this Ghibelline-aligned city. During the Renaissance, the people of this city celebrated the fact that Virgil was born nearby. In 1629, Emperor Ferdinand II sent a *landsknecht* army to besiege this city, forcing Charles, the Duke of Nevers, to back away. Though born in Ferrara, Isabella d'Este became a *marchesa* of this city. After the deaths of Francesco IV, Ferdinando, and Vincenzo II, this city was up for grabs in a War for its (*) succession fought as a side-theater to the Thirty Years' War. This city reached the apex of its economic power under Federico II, who commissioned Giulio Romano to build the Palazzo de Te, and Ludovico III, who made Andrea Mantegna the court artist. For 10 points, name this city in north-central Italy which was controlled by the Gonzaga family.

ANSWER: Mantua

5. In Alzheimer's disease, mutations of either one of two of these residues in presenilin-1 eliminates the protein's ability to interact with Notch. The condensation of this compound and carbamoyl phosphate is the first committed step of pyrimidine biosynthesis. P-type ATPases all catalyze the phosphorylation of this amino acid, whose namesake protease is encoded for by HIV's pol gene. The N-methyl derivative of this amino acid is the selective agonist for an ionotropic receptor blocked in a voltage-dependent fashion by magnesium. This compound hydrogen bonds to a histidine to form part of the catalytic triad of chymotrypsin. A cytosolic (*) transaminase converts this amino acid to oxaloacetate in a shuttle named for this malate and this compound. The methyl ester of the dipeptide that this amino acid forms with phenylalanine is the active ingredient of a namesake artificial sweetener. For 10 points, name this amino acid that like glutamate has an acidic side chain.
 ANSWER: aspartate [or aspartic acid; or Asp; or D]

6. The first female martyr of this denomination refused to renounce her faith despite pleas to do so by the horseman she loved. The official organ of this denomination, the *Hask*, is decorated with an ear of corn on the cover. This denomination preserves a pagan tradition in which a rooster is slaughtered and eaten before sundown, known as matagh. One of this denomination's holiest sites is called the Deep Pit, or Khor Virap, where its patron saint was imprisoned for fourteen years. This denomination convoked the 506 Council of Dvin, which rejected the (*) Chalcedonian two-nature definition of Christ. The newest diocese of this denomination, Artsakh, was established in 1989 after a half-century of Soviet repression. This denomination, which was founded by Bartholomew and Thaddeus, and first governed by Saint Gregory the Illuminator, was established soon after Tiridates the Great converted to Christianity in 301. For 10 points, name this oldest national church in the world, whose membership was considerably thinned by a genocide perpetrated by the Turks.
 ANSWER: Armenian Apostolic Church [or Gregorian Church, before "Gregory" is read]

7. In 2010, a group led by Randolph Pohl used this particle to accurately determine the radius of the proton. I. I. Rabi quipped "Who ordered that?" when he was informed of the discovery of this particle, which most commonly decays via Michel decay. Bruno Rossi invented the triode coincidence circuit as part of an experiment that detected these particles, whose (*) anomalous magnetic dipole moment differs from theoretical predictions by 3.5 standard deviations. In 1956, Luis Alvarez discovered that this particle can catalyze protium-deuterium nuclear fusion. These particles are created from pion decay in the upper atmosphere, and they can only be detected on earth due to time dilation of their 2.2-microsecond lifetime. These charged particles are less massive than tau particles but roughly 200 times more massive than electrons. For 10 points, name these second-generation leptons.
 ANSWER: muons

8. A writing in this literary genre ends with a crowd of people asking the title character for pots, pans, tables, and tripods, as he constantly asks "Who would help me stand up?" A work in this genre describes a sumptuous dish with the longest word in the history of literature. Divinities played a bigger role in the *phlyax* style in this genre, popular in Magna Graecia. The *Deipnosophistae* by Athenaeus of Naucratis preserves fragments of writings by Alexis and Antiphanes in this literary genre. The *bomochus*, *ieron*, and (*) *alazon* recurred in writings from this genre. By saving the title character after his accidental fall into a well, Sostratos persuades Knemon to grant his daughter's hand in marriage in *Dyskolos* by Menander, the completest example of the "New" period of this genre. A writer in this genre compared Athenian jurors to wasps and wrote about ladies who try to end the Peloponnesian War by withholding sex from their husbands. For 10 points, name this Ancient Greek theatrical genre represented by the plays of Aristophanes.
 ANSWER: ancient Greek comedy [accept Old Comedy, Middle Comedy, New Comedy, or really any kind of comedy]

9. In a painting of this type, the neck of a tall, slim woman bedecked in black gloves extends to the top edge of the painting, leaving out her head. In another painting of this type by the same artist uses a gray double bass held by a disembodied hand as a framing device. The artists Jacques Villegle and Raymond Hains made collages by destroying these images. A woman wears an orchid headdress and carries a giant blue and gold palm branch in *Gismonda*, which is one of these paintings commissioned by Sarah Bernhardt, created by the artist of the *Slav Epic*, Alphonse Mucha. Theophile Steinlen is best known for a painting of this kind, in which a (*) cat perched on an orange slab curls its tail around a large "R" written in black and a small "D" in white. A

series of these paintings shows women such as Jane Avril and La Goulue, or The Glutton, raising their legs to dance the can-can. For 10 points, name these paintings advertising Montmartre locations such as Le Chat Noir and Moulin Rouge, many of which were made by Henri Toulouse-Lautrec.

ANSWER: posters

10. A two-time governor of this state was backed by supporter who chanted "he steals but he gets things done." The MMDC movement, named for the initials of each of four slain students, arose in this state. The immigrant Italian Matarazzo family set up a chain of businesses in this state and became incredibly wealthy. A governor of this state, Julio Prestes, was elected president, but never got to serve his term due to a coup. Giuseppe Ungaretti and Fernand Braudel were among the first faculty members at this state's prestigious flagship public university, which was established in 1934. In 1922, this state experienced a cultural boom when the (*) Week of Modern Art was held in its capital. This state was home to most of the "coffee" interests during the "coffee with milk" era of politics, as opposed to the "milk" of Minas Gerais. The 1932 Constitutionalist Revolution broke out in protest to Getulio Vargas in this state. For 10 points, name this richest and most populous state in Brazil, whose namesake city is the largest city in South America.

ANSWER: Sao Paulo

11. An orgy of violence erupted in this city after Oeneus stoned the guard dog of several brothers here. A statue of Aidos, or Modesty, was erected by a ruler of this city when his daughter covered her face with a veil to indicate that she was leaving with her husband. The town of Amyclae near this city was the cult center of Hyacinthus of lustful-discus-murder fame. Because their mother did not know who was born first, the Oracle of Delphi resolved that Procles and Eurysthenes should (*) both be made kings of this city. In this city, Icarius lost a footrace to Odysseus, who married Penelope as a result. Near this city, a horse was sacrificed and atop the pieces of its carcass, a bevy of suitors swore an oath to protect whoever of them was successful. This city passed from the hands of Tyndareus to the suitor who drew the correct straw and had his house raided by Paris. For 10 points, name this city ruled by Menelaus and Helen just before the Trojan War.

ANSWER: Sparta [or Lacedaemon]

12. James Michener chronicled this event in his book *The Bridge at Andau*, named for an escape route many refugees used during it. During this event, several people rallied behind a flag with its coat of arms cut out. The Operation Safe Haven airlift evacuated many people after this event, during which snipers positioned themselves in the Corvin Cinema. Joe Miko shot a number of films documenting this event. The letters "W.C." were impishly inscribed on a thirty-foot tall statue that was pulled down early in this event in response to (*) Erno Gero's speech condemning a list of student demands. Time Magazine once named as its Person of the Year the "freedom fighters" during this event. Cardinal Josef Mindszenty holed up in the US embassy during this event. Ivan Konev launched Operation Whirlwind as a result of this event, bringing Janos Kadar in tow and capturing Imre Nagy. For 10 points, name this 1956 uprising that was quelled when Soviet tanks rolled into Budapest.

ANSWER: Hungarian Revolution [or Soviet invasion of Hungary; or 1956 os forradalom; or felkeles; accept Hungarian after "uprising" is read; accept synonyms for revolution or invasion]

13. One algorithm of this type partitions a binary search tree into preferred paths and generates a tango tree. Another algorithm of this type, which is random and operates within a factor of twice the k th harmonic number of optimality, is the marking algorithm. That algorithm solves the paging problem, which is a specific case of the more general k -server problem tackled by these algorithms. They may be compared to either adaptive or oblivious adversaries, and their performance across all input cases is compared to an optimal alternative in (*) competitive analysis. One of these algorithms tackles the ski rental problem, which concerns the choice between paying a small repeating cost or a large one-time cost. These algorithms must respond immediately to each request they receive. For 10 points, name this class of algorithms that receive input one piece at a time instead of having it all at the start.

ANSWER: online algorithms

14. In a satirical novel written in this language, an old commander's wife begins an affair with a young soldier, and they compete to see who can destroy the most paraphernalia of a dictator. In a novel written in this language, a woman in charge of a resistance movement has a change of heart about carrying out an

assassination in a jewelry shop. The protagonist of another novel written in this language buys an ox for companionship after his grandson chokes to death while eating beans, his son-in-law dies in a construction accident, and his son dies while donating blood. Another writer who uses this language alternates letters between himself and an aspiring writer with the story of a detective investigating claims of cannibalism in *The (*) Republic of Wine*, and chronicled several generations of a distillery-owning family in *Red Sorghum*. An author living in exile in France used this language to produce a novel about a man who explores the countryside upon receiving a false cancer diagnosis, titled *Soul Mountain*. For 10 points, name this language used by Nobelists Mo Yan and Gao Xingjian.

ANSWER: Chinese [or Hanyu; or Zhongwen; in order, the books are: *Serve the People!*, *Lust, Caution*, *To Live*, *The Republic of Wine*, *Red Sorghum*, and *Soul Mountain*]

15. This non-Wayne Booth thinker highlighted the moral significance of the relationship between Adam and Maggie Verver in Henry James's *The Golden Bowl*, in a debate against Richard Posner about the legitimacy of ethical criticism. This thinker compared the efforts of Rabindranath Tagore and John Dewey in combating rote-memorization in the education systems of their respective countries in a recent book defending liberal arts education. This philosopher's first book argues that Plato's early dialogues break from earlier Greek tragedy in presenting (*) life as free from non-rational factors and fragility. With Amartya Sen, this thinker redefined poverty as a deficit in "capabilities." She put forth seven criteria, such as violability and fungibility, for objectification, and condemned female genital mutilation, in her book *Sex and Social Justice*. For 10 points, name this sane feminist philosopher who teaches at the University of Chicago.

ANSWER: Martha Nussbaum [or Martha Craven Nussbaum]

16. A woman in this poem "gives with such supple confusions / That the giving famishes the craving." This poem popularized a term for Cold War-era intelligence practice of spreading misinformation with its image of a "a wilderness of mirrors." The opening stanza of this poem mentions that "the goat coughs at night in the field overhead" the speaker's house, which is where "the jew squats on the window sill." In this poem, Christ comes as a tiger to the fictional foreign personages Mr. Silvero, Hakagawa, Madame de Tornquist, and Fraulein von Kulp. Katherine Anne Porter took the title "Flowering Judas" from this poem, whose speaker has lost his (*) passion, "sight, smell, hearing, taste and touch." Prior to Ezra Pound's intervention, the preface to *The Waste Land* was going to be this poem, which asks "After such knowledge, what forgiveness?" and ends: "Tenants of the house, thoughts of a dry brain in a dry season." For 10 points, name this poem written from the perspective of an "old man in a dry month," by T.S. Eliot.

ANSWER: "Gerontion"

17. Composer and piece type required. One of these pieces in A major starts with an immediate octave drop in the first violins. Another of these pieces begins with the strings playing one bar each of G, D, E-flat, and F-sharp in syncopated quarter notes. The main theme of the finale of a piece of this kind is a variation on the composer's aria "Ha, wie will ich triumphieren." A particularly animated middle movement in one of these pieces led Alfred Einstein to exclaim "What a deepening of the concept of Andante is here!" in a study of its composer. The penultimate of these pieces unusually begins with the divided (*) viola accompaniment playing on the low strings, before the rest of the strings join in. All the themes come together in a "five-voice fugato" in one of these pieces that received its nickname from Johann Peter Salomon. The twenty-fifth of these pieces is known as the "little G minor," and two of the three to open with slow movements are nicknamed the *Linz* and the *Prague*. For 10 points, name these forty-one pieces, the last of which is known as the *Jupiter*.

ANSWER: symphonies by Wolfgang Amadeus Mozart [or Mozart symphonies; prompt on partial answer]

18. The band behind this album gets kidnapped and performs a song from it at Middleton High in an episode of *Kim Possible*. DJ Homicide plays the turntables on a song from this album that justifies the singer's title condition by saying "The president seems to be just fine." A song from this album rhetorically asks, "what do you do when opportunity knocks, when success stalks and along comes fame." A song from this album asks the listener, "Would you help me if I wanted to die," and commands him to "tell me why / why oh why." The title of this album, which contains "Home," "Stoned," and (*) "Fallen Horses," appears in neon yellow and red lettering down the side of a building jutting out from a planet on the cover image. The singer of the best-known song on this album tells a beggar "I said yep, what a concept, I could use a little fuel myself," and inverts Shakespeare's

formula by stating "All that glitters is gold." That song from this album tells you to "get your game on, go play." For 10 points, name this seminal space-themed 1999 album by Smash Mouth that contains the song "All Star."

ANSWER: Astro Lounge

19. A diethyl cyanide of this element is known as Nagata's reagent. An alkene inserts into a bond between this element and carbon in a non-Negishi coupling reaction developed by Ei-ichi Negishi. The "red" form of this compound, also known as SMEAH, catalyzes the production of E-allylic alcohols in the Chan alkyne reduction. An acylium ion and a phenolate of this element form as intermediates in the Fries rearrangement. Two atoms of this element are present in a common reagent that reduces nitriles and esters to aldehydes. A methylene bridge and a chlorine atom connect this element to (*) titanium in Tebbe's reagent. A more powerful reducing agent than sodium borohydride is a hydride of lithium and this element, which is present along with titanium in Ziegler-Natta catalysts, and the most common catalyst for a Friedel-Crafts catalyst is this element's trichloride. For 10 points, name this element from the boron group which is refined in the Bayer process from its ore bauxite.

ANSWER: aluminum [or Al]

20. As a prank, this group hired limousines to take black diplomats to a political event that they hadn't been invited to. A liaison to this group took a sloop out to Chesapeake Bay and was found several days later with a bullet in his brain. The leader of this group came up with a plan to photograph officials on a houseboat in Baltimore in compromising positions with prostitutes as part of his Operation Gemstone. This group's nickname traces to a Thanksgiving dinner remark by the grandmother of its member David Young. A member of this group was unable to carry out his planned excursion to Arthur Bremer's apartment to (*) plant materials. This group ransacked the office of Lewis J. Fielding, a psychiatrist based in Los Angeles. This group was founded in response to Daniel Ellsberg's publication of the Pentagon Papers, and it is best-known for authorizing five men to break into the DNC headquarters. For 10 points, name this White House Special Investigations Unit headed by G. Gordon Liddy, who got their nickname because their job was to stop classified information leaks.

ANSWER: Plumbers [or White House Plumbers; or Special Investigations Unit before mentioned, or SIU before mentioned]

TB. Carved poor man statues with a slot for donating coins can be found outside many of this denomination's places of worship. A revival movement in this denomination was founded by an amateur botanist concerned with the rampant alcoholism in his congregation. Early in the history of this denomination, the fiery Croatian reformer Matthias Flacius Illyricus accused his opponents of "synergism." Philip Nicolai's "Wake, Awake, for Night Is Flying" is a popular hymn in this denomination. The Wisconsin and Missouri Synods are two of the three largest bodies of this denomination in the United States. In this denomination, children are taught using the (*) Small Catechism, whereas clergymen leading congregations consult the Large Catechism. Jakob Andrea and Martin Chenmitz were the main authors of this denomination's doctrinal standard, the Book of Concord. Twenty-eight chief articles of faith make up this denomination's Augsburg Confession, which was written by Philip Melancthon. For 10 points, name this Protestant denomination established by the man who decorated the Wittenberg church with his Ninety-Five Theses.

ANSWER: Lutheranism [prompt on Protestantism until it is mentioned]

BONUSES

1. The sunny 16 and looney 11 rules can be used to estimate the correct amount of this variable when a light meter isn't available. For 10 points each:

[10] Identify this measure of how much light per unit area reaches a photographic film, controlled by factors such as shutter speed, lens aperture, and luminance. Photos that are "over" this measure appear bleached.

ANSWER: exposure [accept word forms, such as exposed]

[10] This MIT professor and collaborator with Gjon Mili took extremely short exposure photographs of bullets in flight and nuclear explosions with the help of a strobe light, a device he popularized.

ANSWER: Harold Edgerton [or "Doc" Edgerton; or Harold Eugene Edgerton]

[10] This method of guaranteeing correct exposure, co-developed with Fred Archer, splits pictures into numerical sections that differ from the next one up or down by one tonal click, with V (five) reflecting the middle tone.

ANSWER: zone system

2. In the most popular novel in this genre, a woman catches a cold after climbing to a roof in the pouring rain to overhear a plan to kill Laura Fairlie. For 10 points each:

[10] Identify this genre of emotion-rousing crime fiction that became a huge fad in Victorian literature after the 1860 publication of *The Woman in White*.

ANSWER: sensation novels

[10] *Armadale* and *The Woman in White* are sensation novels by this Victorian author, who wrote a gripping novel about the theft of an Indian diamond, titled *The Moonstone*.

ANSWER: Wilkie Collins

[10] The missing wife of the gold prospector George Talboys had in fact faked her death and started a new life under the name "Lucy Graham" in this sensation novel by Mary Elizabeth Braddon.

ANSWER: Lady Audley's Secret

3. During this man's presidency, North Carolina congressman Robert Potter resigned after personally castrating two men he believed were carrying on an affair with his wife. For 10 points each:

[10] Name this president, who endured the much-less interesting Peggy Eaton affair, leading to his unofficial advisement by the Kitchen Cabinet.

ANSWER: Andrew Jackson

[10] Jackson alienated his Cabinet further by reassigning his first Secretary of the Treasury to Secretary of State, and outright firing the new Secretary of the Treasury, because both had refused to remove deposits from the Second Bank of the United States and reassign them to state banks. Name either secretary.

ANSWER: William J. Duane or Louis McLane [or William John Duane]

[10] Jackson received flak during the 1828 election because his wife, who had this first name, had never finished divorcing her first husband, so she was portrayed as being bigamous.

ANSWER: Rachel

4. An ethyl group is replaced with a trifluoroethyl group in the Still-Gennari modification of this reaction, whose starting products are commonly synthesized with the Arbuzov reaction. For 10 points each:

[10] Name this reaction that produces E-alkenes by reacting phosphonate-stabilized carbanions with ketones or aldehydes.

ANSWER: Horner-Wadsworth-Emmons reaction [or HWE reaction]

[10] The HWE is a widely-used analogue of this better-known reaction, which produces an alkene through reaction with a triphenylphosphonium ylide.

ANSWER: Wittig reaction

[10] The HWE reaction is the first step in the Seyferth procedure, which is a reaction of this type, in which a compound grows by one iteration of its basic structural unit. Usually but not always, that just means increasing the carbon chain by one, like with aldoses in the Kiliani-Fischer synthesis.

ANSWER: homologation [or homologization]

5. The case of *Massachusetts v. Melon* rejected the "taxpayer" form of this concept, whose three major requirements are redressability, causation, and injury-in-fact. For 10 points each:

[10] Name this concept, the ability of a party to bring a case to suit.

ANSWER: standing [accept word forms; or locus standi]

[10] This 1968 case determined that taxpayers do, in fact, have standing to sue the government if taxpayer funds are being used unconstitutionally as per Article I of the Constitution.

ANSWER: Flast v. Cohen [or Cohen v. Flast]

[10] Although third-party standing is generally prohibited in United States law, a party representing a group in one of these suits may continue to do so even if their personal stake in the suit evaporates. This kind of suit is often filed against pharmaceutical companies on behalf of people who suffered deleterious effects of drugs.

ANSWER: class-action lawsuit [or class suit; or representative action]

6. As an offering to loved ones, it is customary to burn "hell notes" depicting this god, who commands the psychopomp Black and White Guards, and employs two jailers named Ox-Head and Horse-Face. For 10 points each:

[10] Name this god of the underworld in Indian, Buddhist, Chinese, and Japanese mythology.

ANSWER: **Yama** [or the **Hell King**; or **Enma**; or **Yan Wang**; or **Yanluowang**; or **Shinje**; or **Yamaraja**]

[10] After committing suicide by hurling himself at the palace gates repeatedly until his head split open, this being impressed Lord Yama with his high marks in the civil service examinations, so he was made the king of ghosts. He can command up to 80,000 demons.

ANSWER: **Zhong Kui** [or **Chung Kwei**; or **Shoki**]

[10] This character replaces Yama as the King of Hell in a 1640 "supplement" to the novel in which he and his motley crew of Sandy, Pigsy, and Xuanzang make a "journey to the west."

ANSWER: **Monkey King** [or **Sun Wukong**]

7. John Prettyjohns became the first Royal Marine to win the Victoria Cross at this battle, which became known as the "Soldier's Battle" since the thick fog cut off both sides into small battalions. For 10 points each:

[10] Name this 1855 battle where the British held on to the "Sandbag Battery," and the Russians under Alexander Menshikov suffered a devastating defeat to go along with their mild loss at Balaclava just prior.

ANSWER: Battle of **Inkerman**

[10] The Battle of Inkerman was the turning point of this war, fought for control of the naval base at Sevastopol in the title peninsula.

ANSWER: **Crimean War** [or **Eastern War of 1853-56**]

[10] This general's 3,000 troops held off 35,000 Russians at the Battle of Inkerman, a softball compared to his 500 troops doing the same under the command of Charles Napier at the Battle of Miani in India.

ANSWER: John **Pennefather** [or John Lysaght **Pennefather**]

8. This novel contains an avatar of Doug Graebner, in the form of an amateur Assyriologist and retired physician who administers heavy doses of opium to his Chinese servant to test his tolerance. For 10 points each:

[10] Name this novel whose title character falls in love with the cultured redhead Celia Madden and falls out of love with the Methodist church in upstate New York where he had been appointed pastor.

ANSWER: *The **Damnation of Theron Ware*** [or ***Illumination***]

[10] Theron Ware, from the aforementioned Harold Frederic novel, lusts after Celia even harder when she likens herself to this free-spirited pseudonymous female author, who used Pauline Viardot as the model for her title character *Consuelo*, and wrote about a noblewoman's affair with her cousin Ralph in the novel *Indiana*.

ANSWER: George **Sand** [or Amantine-Lucile-Aurore **Dupin**]

[10] This loutish Sinclair Lewis title character, a college football captain who gets ordained as a Baptist minister, and his rival Frank Shallard were both modeled after Theron Ware.

ANSWER: **Elmer** Gantry [or Elmer **Gantry**]

9. A collection of these objects whose topology locally resembles a product space is known as a bundle. For 10 points each:

[10] Name these mathematical objects, which are the preimage of a single element under some map.

ANSWER: **fibers**

[10] For a linear map between vector spaces, this space can be described as the fiber of the zero element. This space, also known as the null space, is the space of vectors that map to zero.

ANSWER: **kernel**

[10] This fiber bundle maps a 3-sphere onto a 2-sphere, with circles as the fibers. Under a stereographic projection to Cartesian space, it looks like a collection of nested toruses. It is named for a German mathematician.

ANSWER: **Hopf fibration**

10. This artist painted a lovestruck shepherd and shepherdess exchanging glances in a vineyard in his humorously-titled painting *Are They Thinking about the Grape?* For 10 points each:

[10] Name this French Rococo artist who painted many portraits of his patroness Madame de Pompadour, and depicted putti dressing the goddess of love in *The Toilet of Venus*.

ANSWER: Francois **Boucher**

[10] Boucher created a series of these artworks titled *Fetes italiennes* for the Beauvais workshop, and was appointed director of the rival Gobelins factory, which introduced the interlocking technique for treating them. These artworks often look similar to brocades.

ANSWER: **tapestries** [or **tapestry**]

[10] This other French Rococo painter wove a series of tapestries called *The Pastoral Amusements* during his time as head of the Beauvais tapestry factory, but is better known for his paintings of animals and game, such as *The White Duck* and *Clara the Rhinoceros*.

ANSWER: Jean-Baptiste **Oudry**

11. You are computing a probability amplitude in quantum field theory. Name some tools you might use, for 10 points each.

[10] You might start off by using this theorem named for an Italian physicist, which allows you to contract complicated expressions and write them as sums over two-point functions.

ANSWER: **Wick's** theorem

[10] After applying Wick's theorem, you'd probably use these diagrams to visualize each term in your computation. Named for an American Nobel laureate, they use wavy lines to depict photons and curly lines to depict gluons.

ANSWER: **Feynman** diagrams

[10] The LSZ reduction theorem lets you "amputate" Feynman diagrams by ignoring some of these nasty features, which often lead to divergences when you integrate over their undetermined momenta. These objects are woven together to form a spin foam in one theory of quantum gravity.

ANSWER: **loops**

12. Two answers required. These two men squared off on a highly anticipated *Monday Night Football* match-up on November 30, 1987. For 10 points each:

[10] Name these two men, one a running back for the Los Angeles Raiders and the other a linebacker for the Seattle Seahawks. The latter supposedly getting "run over" by the former player, a two-sport star, is perceived as a sign of his pending status as a draft bust.

ANSWER: Vincent "Bo" **Jackson** and Brian **Bosworth** [or **Bo** and the **Boz**]

[10] Bosworth was a highly touted draft pick, having been a star for Barry Switzer at this then-Big 8 powerhouse university.

ANSWER: University of **Oklahoma** [or **Sooners**]

[10] Also in that *Monday Night Football* match-up, Bo set a-then Raiders record with a 91-yard touchdown. It was later broken by, of all people, this Raiders quarterback, who ran for 93 yards in a much later game.

ANSWER: Terrelle **Pryor**

13. Richard Wilhelm, a friend of Carl Jung's, translated a book about this practice titled *The Secret of the Golden Flower*. For 10 points each:

[10] Name this practice, which in Taoism, is accomplished by cultivating the *qi*, controlling one's posture and breathing, and engaging in intense contemplation

ANSWER: **meditation** [or dao school **deep thinking**; or daojia **mingxiang**]

[10] Some types of Taoist meditation drew from this Theravada Buddhist practice denoting insight into the three marks of existence: impermanence, suffering, and realization of non-self. This practice lends its name to modern Buddhist movements that emerged in Burma and Thailand.

ANSWER: **vipassana**

[10] When asked what he does to meditate, one of these people, named Yan Hui, replied: "I slough off my limbs and trunk, dim my intelligence, depart from my form, leave knowledge behind, and become identical with the Transformational Thoroughfare." The second-best one, Min Sun, was commended for his filial piety.

ANSWER: **disciples of Confucius** [accept equivalents, such as **students of Confucius**; accept also **disciples of Kong** Fuzi]

14. The author of this collection himself murders a charlatan magi who uses a rope to animate an idol, and is chastised by a passing camel-driver for falling asleep. For 10 points each:

[10] Name this 1257 collection of verse anecdotal fables dedicated to the Salghurid Atabeg, and written by Sa'adi.

ANSWER: **Bostan** [or **Bustan**; or *The Orchard*; do not prompt on or accept "Gulistan" or "The Rose Garden" or other wrong answers]

[10] Sa'adi wrote his verse collection *Bostan* and his prose collection *Gulistan* in this language, from which Edward Fitzgerald translated the *Rubaiyat* of Omar Khayyam into English.

ANSWER: **Farsi** [or **Parsi**; or **Persian**]

[10] *Bostan* shares this poetic form, also known as *masnavi*, with the six-book poetic masterwork of Rumi titled for the "Spiritual" version of this poetic form.

ANSWER: **couplets**

15. This pharaoh established a secure turquoise mining operation in Sinai, complete with fortifications to repel Bedouin invaders. For 10 points each:

[10] Name this pharaoh who ordered the construction of the unfinished Black Pyramid and a trap-laden mortuary temple at Hawara, and is best-known for completing a canal to link the Nile with Lake Moeris in the al-Fayyum depression.

ANSWER: **Amenemhet III** [prompt on **Amenemhet**]

[10] Amenemhet III was the most prosperous ruler during this period of Egyptian history, which preceded the Second Intermediate Period and the New Kingdom.

ANSWER: **Middle** Kingdom [or The Period of **Reunification**]

[10] This Egyptian historian and chronicler of the reigns of the pharaohs lists "Lameres" and "Amers" as alternate names for Amenemhet III in his *Aegyptiaca*.

ANSWER: **Manetho**

16. In this play, three women, representing Mao, Lenin, and Marx, read an excerpt from Marx's critique of Hegel's *Philosophy of Right* moments before the protagonist splits their heads with a sword. For 10 points each:

[10] Name this Expressionist drama in which a Madonna with breast cancer swings around wildly as Claudius laughs and Ophelia paints a whore's mask on the title character. It is the best-known play by Heiner Müller.

ANSWER: *The* **Hamletmachine** [or *Die* **Hamletmaschine**]

[10] In *Hamletmachine*, Müller ran off the deep end with the principles of distancing effect and epic theater laid out by this German dramatist of *Mother Courage and Her Children*.

ANSWER: Bertolt **Brecht** [or Eugen Berthold Friedrich **Brecht**]

[10] Müller got into posthumous legal trouble because his play *Germania 3: Ghosts at the Dead Man* lifted unattributed passages from this play by Brecht, in which the title scientist is forced to recant before the Inquisition, and entrusts his housekeeper's son Andrea Sarti with his unpublished manuscript.

ANSWER: *The Life of* **Galileo** [or *Leben des* **Galilei**]

17. This thinker critiqued the Formalist approach to literature for ignoring social reality in his 1924 book *Literature and Revolution*. For 10 points each:

[10] Name this thinker, who in his book *Results and Prospects* put forth the idea that the entire world needs to advance together economically through political upheaval, ushering in a "permanent revolution."

ANSWER: Leon **Trotsky** [or Lev Davidovich **Bronstein**]

[10] Trotsky and Stalin diverged in their interpretation of this philosophical theory, which uses historical materialism to critique the development of capitalism. It was put forth by, and named for, a co-author of *The Communist Manifesto*.

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

[10] This Trotsky book, written during his exile in Norway, posits that the Soviet Union descended into a "degenerate workers' state" after the death of Lenin. It also calls Stalinism a form of "Bonapartism."

ANSWER: *The* **Revolution Betrayed**: *What Is the Soviet Union and Where Is It Going?* [or **Predannaja revoliucija: Chto takoe SSSR i kuda on idet?**]

18. This animal produces a version of hyaluronan that is five times more massive than the typical variety, which may explain why it is hypersensitive to contact inhibition and thus virtually never gets cancer. For 10 points each:

[10] Name this rodent native to East Africa, which along with a related species named for Damaraland, is the only known eusocial mammal.

ANSWER: **naked mole-rat** [or **Heterocephalus glaber**; or **sand puppy**; or **desert mole rat**; prompt on **mole rat**]

[10] Naked mole-rats take their invincibility a step further by lacking the neurotransmitter substance P, making them unable to perceive this stimulus when exposed to capsaicin or acid. This stimulus can come in phantom, neuropathic, or nociceptive varieties, stubbing a toe being an example of the latter.

ANSWER: pain

[10] Naked mole-rats are also the only known mammals to exhibit this pattern of thermoregulation exhibited by snakes and lizards, in which body temperature varies wildly. It is the opposite of homeothermic regulation.

ANSWER: poikilothermic regulation [accept word forms; prompt on ectothermic; grudgingly prompt on cold-blooded]

19. David King wrote an authoritative study of this practice, whose most famous target may have been the water commissar Nikolai Yeshov. For 10 points each:

[10] Name this practice that Soviet leaders such as Stalin carried out in order to make it appear that deceased dissidents never existed.

ANSWER: airbrushing photos [accept descriptive answers indicating that they were removed from photos]

[10] This lost cosmonaut, who suffered third-degree burns when he foolishly tried to use his coveralls to smother an ignited alcohol-soaked cotton ball in a high oxygen altitude chamber, was airbrushed out of a group photograph of the first six cosmonauts.

ANSWER: Valentin Bondarenko [or Valentin Vasiliyevich Bondarenko]

[10] In a much less horrific instance of airbrushing, photographer Yevgeny Khaldei removed the watch from the wrist of a soldier performing this action after the Battle of Berlin.

ANSWER: raising a flag on the Reichstag

20. In this composer's *Pithoprakta*, scored for forty-six string instruments, a woodblock, two trombones, and a xylophone, each instrument is treated as a molecule obeying the Maxwell-Boltzmann distribution law. For 10 points each:

[10] Name this Greek architect-composer, a proponent of stochastic and computer-generated music who asked each of 61 orchestra members to play their own glissandi in his best known piece, *Metastaseis*.

ANSWER: Iannis Xenakis

[10] This other composer loved computer-generated music, as seen in his *HPSCHD* (harpsichord), and enjoyed randomness in composition, exemplified by his *Music of Changes*. He is best-known for an ambient piece of music that lasts for 4 minutes and 33 seconds.

ANSWER: John Cage [or John Milton Cage, Jr.]

[10] Like Xenakis, this French pioneer of the "spectral" style of composition studied under Messiaen, and used computer-generated loops and seventeen instruments in his piece *Disintegrations*.

ANSWER: Tristan Murail

TB. This psychologist headed an APA task force that reviewed *The Bell Curve* and produced the report "Intelligence: Knowns and Unknowns." For 10 points each:

[10] Name this psychologist who had his students write down their impressions of the Challenger explosion immediately after receiving the news, and again three years later.

ANSWER: Ulric Neisser [or Ulric Gustav Neisser]

[10] Neisser was a leader in the 1950s "revolution" in this field of psychology which studies the namesake mental processes, such as memory, problem solving, and language use.

ANSWER: cognitive psychology [accept word forms]

[10] Neisser coined the term "episodic memory" to characterize the egocentric testimonies of this White House Counsel for Nixon, a "master manipulator" in the Watergate cover-up.

ANSWER: John Dean [or John Wesley Dean III]