## hsapq

1. This man was the leading opponent of Siger of Brabant, who attempted to import the views of Averroes (AA-vuh-roh-ess) into Christianity. His commentary on Peter Lombard's Sentences was used to finish his major work, which is divided into sections on God, man, and Christ. This student of (*) Albertus Magnus was a member of the Dominican order who aimed to synthesize all Aristotelian and Christian thought. For 10 points, name this Scholastic philosopher who wrote the Summa Theologica. ANSWER: Thomas Aquinas [or Tommaso d'Aquino; or Doctor Angelicus]

019-13-75-03101
2. Linguists classify many of these grammatical features as either "realis" or "irrealis," which represent the subjectivity and objectivity of a situation. The word "cras" appears in the future form of this feature in Latin, which, like English, has interrogative and (*) imperative ones. Words such as "tuveria" and "comeria" illustrate this feature in Spanish, which has the most common ones, the conditional and the subjunctive. For 10 points, name this grammatical feature, not to be confused with aspect or tense, that expresses the attitude of the speaker.
ANSWER: moods
020-13-75-03102
3. The remains of Persepolis include a hall with a hundred of these objects. Rhomboid structures comprise another one of these objects at Targu Jiu; that is the 'Endless" one by Constantin Brancusi. Spiraling reliefs depicting the Dacian Wars are the hallmark of the triumphal one commissioned by (*) Trajan. Consisting of a base and a capital, these objects include the ornate "Corinthian" variety and the simpler "Ionic" and "Doric" ones. For 10 points, name these vertical structures that held up many Greek and Roman buildings.
ANSWER: columns [prompt on pillars; accept the more specific forms mentioned in the question]
4. This gulf's Vasilevsky Island is connected to the mainland by the Annunciation Bridge. Other islands within this gulf include Lavansari, Gogland, and the home of the Plague Fort and the Naval Cathedral, Kronstadt. The Saimaa canal terminates on this gulf near Vyborg. The Narva River flows into this gulf, as does the (*) Neva River. Ports on this gulf include Porkkala, the Estonian capital Tallinn, and St. Petersburg. For 10 points, name this gulf of the Baltic Sea, which is named for the country on its north.
ANSWER: Gulf of Finland
5. Francois Noel Babeuf was executed for leading a failed attempt to overthrow this government. This body was governed by a legislature with two houses called the Corps Legislatif. Those houses of this government were the Council of Five Hundred and the Council of Ancients. Dissolved by the Coup of $18(*)$ Brumaire, this government was named for its five-person executive. For 10 points, name this corrupt government of the French Revolution that ruled from 1795 to 1799 following the Committee of Public Safety.
ANSWER: Directory [or Directoire]
6. He's not Archimedes, but this man is the namesake of the polar graph 'r equals the square root of theta'; that is his namesake parabolic spiral. One statement named for this man is the basis of the RSA encryption scheme. The Taniyama-Shimura Conjecture was used by Andrew Wiles to prove another theorem by this man; that theorem states that there are no integers $a, b$, and $\mathbf{c}$ such that (*) a to the n plus b to the n equals c to the $\mathrm{n} "$ when n is an integer greater than two. For 10 points, identify this Frenchman known for his Little and Last theorems.
ANSWER: Pierre de Fermat
189-13-75-03106
7. One character in this novel dreams about a dead bird in a cage. Another of its characters is fatally bitten by a snake after giving birth to the protagonist's son. The main character of this novel practices business with Kamaswami and falls in love with the courtesan (*) Kamala. The ferryman Vasudeva teaches the title character of this novel the Way of the River, which is imparted to Govinda. For 10 points, name this novel about a Brahmin's son seeking enlightenment, by Hermann Hesse. ANSWER: Siddhartha
8. Brunner's glands secrete this substance in the small intestine. Its main components are large glycoproteins that are rich in oligosaccharides. H. pylori causes disease by secreting molecules that break down this substance. Produced by goblet cells, this substance is pushed along by cilia, which are found on (*) epithelial cells. This substance, which is overproduced in cystic fibrosis, traps pathogens and can clog the airway during infections. For 10 points, name this thick, yellowish substance expelled from the body when coughing or blowing your nose.
ANSWER: mucus [prompt on phlegm; prompt on sputum]
9. People hanged for this event included William Drummond. This event saw attacks on the friendly Pamunkey tribe as well as the Susquehanock by members of the Occaneechi tribe. John Ingram took over leadership of this event after the original leader died of dysentery. This event saw the burning of the city of (*) Jamestown. Occurring due to growing sentiment against the governor for his inaction against Indian raids, for 10 points, name this rebellion against the rule of William Berkeley in Virginia in 1676. ANSWER: Nathaniel Bacon's Rebellion

201-13-75-03109
10. This character demands "ocular proof" from a figure he says "hadst been better have been born a dog than answer my waked wrath." His gift to his wife is taken by Emilia, whose husband utilizes that handkerchief for his own ends. Near the end of the play, this character laments, "I (*) kissed thee ere I killed thee." This man angers a subordinate for promoting Michael Cassio instead of him. He smothers his wife, Desdemona, having been manipulated by Iago. For 10 points, name this Shakespearean title character, the Moor of Venice.
ANSWER: Othello
052-13-75-03110
11. This hero joins Alexander the Great and Julius Caesar in the classical triad of the medieval "Nine Worthies." He scores one kill after Euphorbus and Apollo inflict prior wounds. This father of baby Astyanax (uh-STY-ah-nax) throws a spear through seven layers of an eight-ply shield while dueling Ajax the Greater. This killer of $\left(^{*}\right)$ Patroclus had his dead body tied to a chariot and dragged along the ground in the Iliad. For 10 points, name this husband of Andromache and son of Priam, a Trojan champion killed by Achilles.
ANSWER: Hector
12. This composer was inspired by an ode written by Alphonse de Lamartine for his piece Les Preludes, an example of the symphonic poem, a form he invented. This composer depicted a will $o^{\prime}$ the wisp in his piece "Feux follets," (foe-foe-LAY) which, along with 'Mazeppa," is found in a collection of twelve pieces. He also composed a set of nineteen difficult solo pieces, including the (*) "Rakoczi (ruh KOE skee) March," which were influenced by the folk music of his homeland. For 10 points, name this virtuoso pianist who wrote the Transcendental Etudes and the Hungarian Rhapsodies. ANSWER: Franz Liszt
13. This man recently remarked that his political opponents accuse him of 'everything except being gay and stealing money" from his people. He was previously involved in controversy surrounding Karima El Mahroug, or "Ruby the Heartstealer." This billionaire, known for his (*) "bunga bunga" parties, controls the majority of his country's television broadcasts. This man's decision to pull parliamentary support prompted Mario Monti's resignation. For 10 points, identify this three-time Italian prime minister.
ANSWER: Silvio Berlusconi
14. One prime minister from this political party secured his re-election by literally delivering speeches from soapboxes in a campaign against Neil Kinnock. Another prime minister from this party suffered a scandal when Soviet diplomat Eugene Ivanov was found to be having an affair with Christine Keeler, who was simultaneously seeing Secretary of War (*) John Profumo. For 10 points, name this British political party of Harold MacMillan and John Major, as well as of Major's predecessor, Margaret Thatcher.
ANSWER: Conservative and Unionist Party of the United Kingdom [or Tory; or Tories]
019-13-75-03114
15. One model of this phenomenon was verified by Jean Perrin. Studies of this phenomenon revealed a relationship between the diffusion constant and mobility, Boltzmann's constant, and temperature. That relation is named after Einstein because it was first found in the second of his (*)Annus Mirabilis papers. This phenomenon was first observed in pollen grains moving through water. For 10 points, name this random motion of particles suspended in a fluid, which is named for a Scottish botanist. ANSWER: Brownian motion
16. One of this author's novels follows the complex relationship between Amsel and Matem. Another of his novels is narrated by Pilenz and concerns Joachim Mahlke. He created a character who uses his voice to shatter glass and steal things from shops after refusing to continue (*) growing at the age of three. This man included Dog Years and Cat and Mouse in his Danzig Trilogy. For 10 points, identify this German novelist who wrote about Oskar Matzerath in The Tin Drum.
ANSWER: Gunter Wilhelm Grass
189-13-75-03116
17. In one portion of this pathway, transketolase removes two carbons from one compound to yield erythrose-4-phosphate, and aldolase converts two compounds into sedheptulose-1, 7-bisphosphate. One portion of this pathway produces five molecules of G3P. Sometimes partially named for (*) Andrew Benson, this pathway utilizes the most abundant protein on earth as a catalyst, and it takes place in the stroma of chloroplasts. For 10 points, identify this pathway which utilizes rubisco and follows the light-dependent reactions of photosynthesis.
ANSWER: Calvin-Benson-Bassham Cycle [prompt on dark reactions]
18. This ruler's men burned forests as part of the punishing 'Harrowing of the North." He faced the "Revolt of the Earls" that was squelched by the warrior bishop Odo. This man's son was known as "Rufus" and was killed in a hunting accident in the New Forest. He ordered a survey of landholdings called the Domesday (DOOMS-day) Book. This man was crowned king of England after a victory depicted in the (*) Bayeux Tapestry; that battle was over Harold Godwinson in 1066. For 10 points, name this Norman ruler who won the Battle of Hastings.
ANSWER: William I [or William the Conqueror; or William the Bastard; or William II of Normandy; or Guillaume le Conquerant; or Guillaume le Batard; prompt on William]

052-13-75-03118
19. One character in this work quotes Baudelaire while talking to the prostitute Fat Violet. Another character constantly refers to her hatred of the foghorn which recurs in this play. The author of this semi-autobiographical play did not allow it to be performed in his lifetime, although he posthumously won the Pulitzer Prize for it. The members of the central family include the tubercular (*) Edmund, who is the son of the former actor James and the morphine-addicted Mary. For 10 points, name this play about the Tyrone family, by Eugene O'Neill.
ANSWER: Long Day's Journey into Night
192-13-75-03119
20. On the bottom of this painting, a large muscular man stands at the edge of a boat holding up an oar. A group at the top right corner of this painting clutches a large column. Daniele da Volterra, the so-called 'breeches painter," censored the genitalia in this painting, whose artist included a self-portrait of himself in the form of (*) flayed skin held by St. Bartholomew. A characteristically intense depiction of Christ appears at the center of this work, which takes up an entire wall in the Sistine Chapel. For 10 points, identify this depiction of the end of times, created by Michelangelo. ANSWER: The Last Judgment

189-13-75-03120
21. This man wrote a short story in which May Bartram is kept distant by John Marcher and a novel about the marriageable Nanda Brookenham. This author of "Beast in the Jungle" and The Awkward Age wrote of an expatriate who falls ill in the Colosseum with Roman fever and another who is torn between Caspar Goodwood and Gilbert Osmond. This creator of (*) Daisy Miller and Isabel Archer wrote of a governess protecting Miles and Flora from ghosts. For 10 points, name this American novelist of The Portrait of a Lady and The Turn of the Screw.
ANSWER: Henry James
104-13-75-03121
22. This quantity is the time derivative of angular velocity. In rotational equilibrium, this quantity sums to zero. It is equal to the angular acceleration multiplied by the moment of inertia, which is the rotational analog of mass. Calculating this quantity makes notable use of the (*) right-hand rule, since it is the cross-product of the position vector and force vector. For 10 points, identify this rotational analog of force, which causes a rotational acceleration of a body about an axis.
ANSWER: torque
23. Until being forced to resign the post, this man worked as a customs collector in New York City with the support of Roscoe Conkling. As President, this man signed the Chinese Exclusion Act. This President's administration also saw the passage of a law demanding that federal employees be appointed on the basis of merit. That 1883 law, the (*) Pendleton Civil Service Act, followed Charles Guiteau's assassination of this man's predecessor. For 10 points, name this man who ascended to the presidency after the death of James Garfield.
ANSWER: Chester Alan Arthur

1. This monarch established Stanislaw Poniatowski on the Polish throne. For 10 points each:
[10] Name this enlightened despot, an empress of Russia who conquered Crimea and romanced people like Grigory Orlov.
ANSWER: Catherine the Great [or Catherine II of Russia; or Yekaterina Alekseyevna; or Yekaterina Velikaya; or Sophie Frederike Auguste; prompt on Catherine]
[10] Catherine the Great came to power shortly before the assassination of this unpopular husband of hers. ANSWER: Peter III of Russia [or Pyotr Fyodorovich; or Karl Peter Ulrich; prompt on Peter] [10] This favorite of Catherine the Great aided in the annexation of Crimea and served as governor of the southern territories. He was the namesake of a "battleship" that suffered a mutiny in the 1905 revolution.
ANSWER: Grigory Aleksandrovich Potemkin
2. Two characters in this work are drunkards named Trinculo and Stephano. For 10 points each:
[10] Name this Shakespeare play in which Prospero conjures up the title storm so that his brother, who usurped his throne, crashes on an island.
ANSWER: The Tempest
[10] In The Tempest, this daughter of Prospero falls in love with Ferdinand. Caliban had earlier tried to rape her.
ANSWER: Miranda
[10] Near the end of the play, Miranda meets all the other characters and famously exclaims this sentence.
Prospero simply replies, "'Tis new to thee."
ANSWER: "O brave new world, that has such people in't!"
192-13-75-03202
3. The third movement of this work is titled "Scene in the Fields." For 10 points each:
[10] Identify this symphony whose final movements are titled "March to the Scaffold" and "Dream of a Witches' Sabbath." The composer of this work also composed Harold in Italy.
ANSWER: Symphonie Fantastique
[10] Symphonie Fantstique was composed by this French composer. His operatic works include Les
Troyens and Benvenuto Cellini.
ANSWER: Hector Berlioz
[10] This instrument is used in the idée fixe theme in the "March to the Scaffold" movement, as well as in an idée fixe as a "vulgar dance tune" played in C in the "Dream of a Witches' Sabbath" movement.
ANSWER: clarinet
4. This German scholar wrote long studies of The Religion of China and The Religion of India. For 10 points each:
[10] Name this sociologist, who also defined the state as a monopoly on legitimate violence.
ANSWER: Max Weber
[10] Weber wrote this study arguing that Calvinist ideas, such as signs of predestination in this world, led to a more industrious culture.
ANSWER: The Protestant Ethic and the Spirit of Capitalism [or Die Protestantische Ethik und der Geist des Kapitalismus]
[10] Weber wrote on this activity "as a Vocation" in a work describing charisma as one of three foundations for rule. A common college major is the "science" of this field, which often looks at numerical models for voting.
ANSWER: politics [or political science]
5. This movie's villain wears a prosthetic plate inside his mouth to hide the disfigurement caused by a failed cyanide pill. For 10 points each:
[10] Name this movie in which the antagonist, Raoul Silva, is determined to kill his former superior. It ends in the protagonist's ancestral home in Scotland.
ANSWER: Skyfall
[10] Skyfall was the most recent film to feature this secret agent, who is also known as Agent 007.
ANSWER: James Bond [or James Bond]
[10] This Australian actor played James Bond once in the 1969 film On Her Majesty's Secret Service. The film is highly praised, even if his performance is not.
ANSWER: George Robert Lazenby
052-13-75-03205
6. This novel is narrated by Celie, whose letters to God compose the majority of this work. For 10 points each:
[10] Name this novel in which Celie is enjoined in a loveless marriage to Albert, while her sister Nettie travels to Africa.
ANSWER: The Color Purple
[10] The Color Purple is a novel by this author of The Temple of My Familiar.
ANSWER: Alice Walker
[10] This former lover of Albert is a carefree, independent woman, who runs off with Germaine, breaking Celie's heart.
ANSWER: Shug Avery [or Shug Avery]
7. Answer some questions about some fundamental kinematics equations in physics. For 10 points each: [10] One equation in kinematics states that the final velocity is equal to the initial velocity plus the product of this quantity and time. It is the time derivative of velocity.
ANSWER: acceleration [prompt on a]
[10] In free-fall motion, the initial velocity term collapses and you can set the change in height equal to the negative product of one-half, gravitational acceleration, and this quantity.
ANSWER: time squared [or the square of time; or time raised to the second power; prompt on answers which use $\mathbf{t}$ in place of time]
[10] Another of the kinematics equations sets the square of final velocity equal to the square of the initial velocity, plus the product of acceleration, displacement, and this constant of proportionality.
ANSWER: two
8. Name these leaders of Egypt, for 10 points each.
[10] This leader from 1956 to 1970 united Egypt with Syria in the United Arab Republic. He also nationalized the Suez Canal.
ANSWER: Gamal Abdel Nasser [or Jamal Abd al-Nasir]
[10] Coming to power in the wake of Anwar Sadat's assassination, this man brought Egypt back to the Arab League, but he was ousted in 2011 after protests in Tahrir Square.
ANSWER: Muhammad Hosni Said Mubarak
[10] This man, a leader of the 1952 Egyptian revolution and the author of Egypt's Fate, served as the first president of the Republic of Egypt.
ANSWER: Muhammad Naguib
192-13-75-03208
9. This organelle has been described as a "membrane factory." For 10 points each:
[10] Name this network of tubules and vesicles that is found in "rough" and "smooth" varieties, depending if there are protein-manufacturing ribosomes located on its surface.
ANSWER: endoplasmic reticulum [or ER]
[10] This is the term for flattened regions of the rough endoplasmic reticulum, although it is more frequently used to refer to the flattened membrane disk that makes up the Golgi apparatus. A typical Golgi has 3 to 7 of these stacked together.
ANSWER: cisternae [or cisterna]
[10] In the Golgi, apolipoprotein is phosphorylated and goes on to form this molecule in the liver. It works to transport lipids internally in the border and is one of the major groups of lipoproteins.
ANSWER: VLDL [or Very-low-density lipoprotein]
052-13-75-03209
10. Answer the following about trickster figures in myth, for 10 points each.
[10] American Indian folklore can involve trickster figures like Raven or this being, which resembles a canine mammal common in the Southwest.
ANSWER: Coyote
[10] This spider trickster in African folklore obtained all of the stories in the world from the sky-god Nyame.
ANSWER: Anansi
[10] The trickster character in American folklore, Br'er Rabbit, was popularized in the stories of "Uncle Remus," a fictional character created by this journalist in 1881.
ANSWER: Joel Chandler Harris
052-13-75-03210
11. For 10 points each, name these problems from game theory:
[10] Two players each must decide to cooperate or defect. Each player's best result comes if he defects and the other does not.

## ANSWER: prisoner's dilemma

[10] A contestant chooses one of three doors which may contain a prize in this problem, named after a game show host.
ANSWER: Monty Hall problem
[10] Any game where the profit of one player can only come at the expense of his opponent is in this class. ANSWER: zero-sum game
12. This city-state was ruled for a year by the Thirty Tyrants. For 10 points each:
[10] Name this Greek city-state that was connected to its port Piraeus by the Long Walls and is called the "birthplace of democracy."
ANSWER: Athens [or Athenai]
[10] This practice in Athens involved exiling a person for 10 years if they were seen as a threat to stability. ANSWER: ostracism [or ostrakophoria]
[10] This Athenian statesman helped start democratic life in Athens by reforming the constitution and creating a new code of laws that was less strict than Draco's.
ANSWER: Solon
023-13-75-03212
13. This man mistakes a barber's basin being worn in the rain for the helmet of Mambrino. For 10 points each:
[10] Name this literary character assisted by Sancho Panza who mistakes windmills for giants.
ANSWER: Don Quixote [or Alonso Quixano; or Alonso Quixano]
[10] This Spanish author created Don Quixote.
ANSWER: Miguel Cervantes [or Miguel de Cervantes Saavedra]
[10] This fake knight defeats Don Quixote in battle and forces him to retire for a year, during which time Quixote recovers from his madness.
ANSWER: Knight of the White Moon [or Samson Carrasco; or Samson Carrasco]
023-13-75-03213
14. The title character of this opera is attacked by Don Jose while Escamillo is cheered by a nearby crowd. For 10 points each:
[10] Name this opera about a gypsy who enchants both a soldier and a bullfighter.
ANSWER: Carmen
[10] Carmen was composed by this Frenchman, who also composed The Pearl Fishers.
ANSWER: Georges Bizet [or Alexandre-Cesar-Leopold Bizet]
[10] Carmen sings that "Love is a rebellious bird" in this aria, which is named for a Cuban dance style.
ANSWER: Habanera aria
023-13-75-03214
15. For 10 points each, answer the following about direct quotes attributed to God.
[10] This is the first direct quotation from God in the Bible, and precedes the first act of creation in the Book of Genesis.
ANSWER: 'Let there be light!'" [or "yehi or"]
[10] While calling out from this object, God is asked what he is and answers "I am that I am." Moses first hears God's voice in front of this seemingly unharmed organism on Mount Horeb.
ANSWER: the burning bush [prompt on bush]
[10] In the Gospels, the Holy Spirit descends in this form upon Jesus's baptism just before God's voice says "This is my Son, whom I love."
ANSWER: a dove
16. This painting was exhibited at the Paris Salon in 1865 , where it caused a scandal due to the title figure's provocative gaze. For 10 points each:
[10] Name this painting, in which a black servant holds flowers to the title prostitute, who lies on a bed with white sheets.
ANSWER: Olympia
[10] Olympia is a painting by this artist, whose other controversial artworks include Luncheon on the Grass
ANSWER: Edouard Manet
[10] The prostitute's pose in Olympia is similar to that of the title figure in Sleeping Venus, which was originally painted by this artist of The Tempest.
ANSWER: Giorgione [or Giorgio Barbarelli da Castelfranco]
140-13-75-03216
17. These acts raised citizenship requirements, authorized the imprisonment and deportation of immigrants during war, and allowed punishment for any form of treason. For 10 points each:
[10] Name this set of laws that angered Democratic-Republicans, since they were seen as a form of attack from Federalists.
ANSWER: Alien and Sedition Acts
[10] The Alien and Sedition Acts were passed under the presidency of this man, who lost in the Presidential Election of 1800, possibly as a result.
ANSWER: John Adams
[10] In response to the Alien and Sedition Acts, Thomas Jefferson and James Madison wrote these documents, stating that Congress should not have powers not listed in the Constitution.
ANSWER: Virginia and Kentucky Resolutions [or Virginia and Kentucky Resolves; accept in either order; prompt on partial answer]

140-13-75-03217
18. For 10 points each, name these plays by George Bernard Shaw.
[10] This play, the basis of the musical My Fair Lady, concerns the linguist Henry Higgins's attempts to reform a flower girl named Eliza Doolittle.
ANSWER: Pygmalion
[10] The title character of this play becomes disillusioned after her father, Andrew Undershaft, gives the Salvation Army financial contributions.
ANSWER: Major Barbara
[10] This work is sometimes performed without its third act, called "Don Juan in Hell," in which the protagonist, John Tanner, imagines himself in a philosophical debate.
ANSWER: Man and Superman
19. In transition metals, this model doesn't always work because of ligand to metal and metal to ligand electron donations. For 10 points each:
[10] Name this model for predicting the geometry of chemical compounds based on the arrangement that would minimize electron pair repulsion.
ANSWER: VSEPR [pronounced "vesper"; accept valence shell electron pair repulsion]
[10] VSEPR predicts that this triatomic greenhouse gas adopts a linear geometry due to the two double bonds on its central atom. Its solid form is dry ice.
ANSWER: carbon dioxide [or CO2]
[10] This rarer geometry is adopted by molecules consisting of three atoms bound to a central atom, which breaks the octet rule by holding two lone pairs. Chlorine trifluoride is one example.
ANSWER: T-shaped
020-13-75-03219
20. The southern part of this country is largely covered by the Deccan Plateau. For 10 points each: [10] Name this South Asian country, east of Pakistan, with cities such as New Delhi and Kolkata.
ANSWER: Republic of India [or Bharat Ganarajya]
[10] This bay lies off of India's southeastern coast. The Ganges and Brahmaputra both flow into this body of water.
ANSWER: Bay of Bengal
[10] This name is given to the "Eastern" and "Western" mountain ranges that flank the sides of the Deccan. ANSWER: Ghats

192-13-75-03220
21. Answer the following about giraffes, for 10 points each.
[10] Because they eat plants, giraffes fall under this dietary classification, also known as primary consumers.
ANSWER: herbivores
[10] The giraffe's long neck was cited as an "acquired characteristic," necessary to reach leaves on tall trees, by this French naturalist.
ANSWER: Jean-Baptiste Pierre Antoine de Monet, Chevalier de la Marck
[10] Because they possess this body part, giraffes are classified as ungulates.
ANSWER: hoof [or hooves; prompt on toes]

