



1. The radius of gyration for one of these objects is equal to I over mass times radius, while two pi times the square root of I over mass times radius times the local gravitational acceleration is equal to the period for one of these objects, which Galileo believed was independent of starting point. One of these objects was used to show that the Earth rotates by Foucault. For 10 points, name these objects that are made up of a swinging mass at the end of a rope.

ANSWER: pendulum

149-12-85-24101

BONUS: Name the man who was helped by Robert Kennedy in becoming the first African-American student at the University of Mississippi in 1962.

ANSWER: James Meredith

023-12-85-2410-1

2. The Fisher hypothesis states that this phenomenon's effect is unrelated to real interest rate. Response to this phenomenon is hindered by the existence of menu costs and shoeleather costs. Real interest rate is found by taking nominal interest rate minus the rate of this phenomenon, which comes in "cost-push" and "demand-pull" varieties. The rate of this is measured by changes in the Consumer Price Index. For 10 points, name this phenomenon, a decrease in the value of money.

ANSWER: inflation

192-12-85-24102

BONUS: Name this art movement whose glorification of technology and violence can be seen in works by Giacomo Balla and Umberto Boccioni.

ANSWER: Italian Futurism [or word forms]

020-12-85-2410-1

3. This founder of the newspaper *The Commoner* resigned from his last government post after the *Lusitania* sinking made war seem inevitable. This man was called to Tennessee to defend the Butler Act. Called the "Boy Orator of the Platte" for his Nebraska origins, this man faced off against Clarence Darrow in the Scopes Monkey Trial. For 10 points, name this populist and Democrat who lost in three presidential elections and gave the "Cross of Gold" speech.

ANSWER: William Jennings Bryan

104-12-85-24103

BONUS: In 1976, what leader of the Viet Minh had his name applied to the city formerly known as Saigon?

ANSWER: Ho Chi Minh [or Nguyen Sinh Cung; or Nguyen Tat Tanh; or Nguyen Ai Quoc]

192-12-85-2410-1

4. This god is the father of a being who runs a court of justice at Glitnir. His death was avenged by Vali, who grew to adulthood in one day to slay this god's murderer. This god owns a hall named Breidablik. At his funeral, his wife, Nanna, threw herself on the funeral pyre. This being was killed by his own brother, the blind Hoder. This god would have been released from the underworld, but Loki disguised himself as a giantess and refused to cry. For 10 points, name this Norse god killed by the one object that could slay him, mistletoe.

ANSWER: **Balder**

052-12-85-24104

BONUS: What brother of St. Peter is the patron saint of Russia and Scotland, whose cross adorns the Scottish flag?

ANSWER: St. **Andrew**

030-12-85-2410-1

5. Some cells in this organ are "Merkel" cells, while projections on it are called rete (REET) ridges. Affected by Grover's disease, this organ has one part subdivided into the stratum granulosum (GRAN-you-low-sum) and the stratum spinosum. It contains various mechanoreceptors. Major cell types in this organ include keratinocytes (care-UH-tin-OH-cytes). For 10 points, name this largest organ of the human body, which serves as a major physical barrier and is divided into the dermis and epidermis.

ANSWER: **skin** [or **dermis**; or **epidermis** until it is read]

052-12-85-24105

BONUS: In what state did independent Angus King defeat both Democratic and Republican candidates to win the 2012 election, replacing retiring Senator Olympia Snowe?

ANSWER: **Maine**

019-12-85-2410-1

6. This was the third single from the *Wild Ones* album and is accompanied by a video which uses split screen to show beach scenes from Acapulco. This song, which knocked "Call Me Maybe" out of the #1 spot on the Billboard chart, exclaims "my Bugatti the same road" and asks "who done paved the road wider?" For 10 points, name this 2012 hit which advocates doing the title action "while you work," and contains a pursed lips-produced melody created by Flo Rida.

ANSWER: "**Whistle**"

019-12-85-24106

BONUS: Name this American painter who created a portrait of Paul Revere holding one of his silver wares, as well as *Watson and the Shark*.

ANSWER: John Singleton **Copley**

020-12-85-2410-1

7. The main drug used to treat this disease is activated by the KatG catalase-peroxidase and inhibits an enoyl-acyl carrier protein reductase; that drug is often given alongside ethambutol and rifampicin and is called isoniazid. Its causative agent has mycolic acids in its cell wall. This disease causes caseous necrosis and granulomas to appear in the target organ, and it is caused by a mycobacterium. It is often detected using a skin test. For 10 points, name this disease that affects the lungs and causes a bloody cough.

ANSWER: **tuberculosis** [or **TB**]

048-12-85-24107

BONUS: "Legs," "Sleeping Bag," and "Sharp Dressed Man" were among the 1980s hits of what band, known for their Texas rock sound and their long beards?

ANSWER: **ZZ Top**

019-12-85-2410-1

8. *Fletcher v. Peck* forbid this state from canceling contracts after the Yazoo land fraud. The Cornerstone Speech was delivered by this state's governor Alexander Stephens. Samuel Worcester was arrested in this state, leading to a Supreme Court case that failed to stop the removal of the Cherokee from this state on the Trail of Tears. This state was founded as a prison colony for debtors by James Oglethorpe. For 10 points, name this Southern state home to Newt Gingrich and Jimmy Carter.

ANSWER: **Georgia**

104-12-85-24108

BONUS: This is a calculation question. What are the roots of the polynomial $x^2 + 12x + 36 = 0$?

ANSWER: $x = \underline{-6}$ [or **-6 and -6**]

080-12-85-2410-1

9. One of this man's poems begins, "While my hair was still cut straight across my forehead I played about the front gate." Another of his poems describes "the apparition of these faces in the crowd; petals on a wet, black bough." This author of "The River-Merchant's Wife: A Letter" and *Hugh Selwyn Mauberley* died without finishing his massive multilingual poem divided into the title sections. For 10 points, name this American poet of "In a Station of the Metro" and *The Cantos*.

ANSWER: Ezra **Pound** [or Ezra Loomis **Pound**]

014-12-85-24109

BONUS: This is a 20-second calculation question. In terms of pi, what is the volume of a right circular cone whose height is 10 and whose base has a radius of 3?

ANSWER: **30 pi**

192-12-85-2410-1

10. This controversy grew from violations of the Boland Amendment and was first reported by Lebanon's *Ash-Shiraa* magazine. One man who lied to Congress during this scandal later hosted a show about "War Stories" on cable TV. The Tower Commission outed Oliver North's role in this scandal, which revealed the source of funds for anti-Sandinista Nicaraguan rebels. For 10 points, name this scandal stemming from the Reagan administration's illegal sale of arms to a hostage-holding Islamic Republic.

ANSWER: **Iran-Contra** affair [or obvious equivalents involving arms sales to **Iran** to fund the **Contras**]

104-12-85-24110

BONUS: What Kelsey Grammer-voiced villain framed Krusty the Clown for armed robbery and has repeatedly failed in his attempts to kill Bart Simpson?

ANSWER: Sideshow **Bob** [or Robert Underdunk **Terwilliger**]

121-12-85-2410-1

11. This poet wrote, "O all the instruments agree the day of his death was a dark cold day" in his "In Memory of W. B. Yeats." This poet claimed, "We must love one another or die" in a work beginning, "I sit in one of the dives on Fifty-Second Street uncertain and afraid." He was inspired by Brueghel's *Landscape with the Fall of Icarus* to write a poem stating, "About suffering they were never wrong, the Old Masters." For 10 points, name this British poet of "September 1, 1939" and "Musee des Beaux Arts."

ANSWER: W. H. **Auden** [or Wystan Hugh **Auden**]

014-12-85-24111

BONUS: What section of the digestive tract consists of the ileum, jejunum, and duodenum?

ANSWER: **small intestine** [prompt on **intestine**]

048-12-85-2410-1

12. A temple to this ruler in Ankara contained the *Res Gestae*, this man's account of his own achievements. Invoking his "moral reforms" that outlawed adultery, this emperor banished his promiscuous daughter, Julia. This ruler screamed, "Quinctilius Varus, give me back my legions!" after hearing of the Battle of the Teutoburg Forest. This man's general, Agrippa, defeated Mark Antony at the Battle of Actium. For 10 points, name this adopted son of Julius Caesar and first Roman emperor.

ANSWER: **Augustus** Caesar [or Gaius Julius Caesar **Octavianus**; or Gaius **Octavius**; prompt on **Caesar**; do not accept or prompt on "Julius Caesar" or "Gaius Julius Caesar"]

080-12-85-24112

BONUS: This is a 30-second calculation question. Name all the quadrants where sine of two times x is positive.

ANSWER: **first** and **third** quadrants [or Quadrants **I** and **III**; accept either order]

174-12-85-2410-1

13. In lesser-noted parts of this election, John Lehman took the seat of Van Wanggaard, and Mahlon Mitchell failed to unseat Rebecca Kleefisch. After a primary challenge by Kathleen Falk, Tom Barrett lost by seven points in this election, which resolved the same issue that sparked a March 2011 occupation of the state capitol. A proposed restriction in collective bargaining rights by public employees was the major issue in, for 10 points, what June 2012 election in which Scott Walker retained his governorship?

ANSWER: 2012 **Wisconsin recall** election [or **recall** election of Scott **Walker** until "Scott Walker" is read; prompt on **recall** election; prompt on Wisconsin **gubernatorial** election; prompt on Wisconsin **governor's** election]

019-12-85-24113

BONUS: This is a 30-second calculation question. A red hat contains three green and one blue candies. A white hat contains three green and three blue candies. A hat is chosen at random, and then a candy is chosen at random from that hat. If the candy is green, then express as the simplest fraction the probability that the hat chosen was red.

ANSWER: **3/5** [or **0.6**; or numerical equivalents]

020-12-85-2410-1

14. Shirakawa discovered a conducting variety of these substances after doping with iodine. These substances can be called isotactic or syndiotactic, either quality making them stereoregular. A solution of these substances can be modeled using Flory-Huggins theory, and one class of compounds used to synthesize these substances work via the Cossee-Arlman mechanism and are titanium-based heterogeneous catalysts known as Ziegler-Natta catalysts. Common examples of these substances include PET, PVC, and nylon. For 10 points, name these molecules that consist of repeating units called monomers.

ANSWER: **polymers**

201-12-85-24114

BONUS: What Hungarian-American physicist is given the nickname "the father of the hydrogen bomb?"

ANSWER: Edward **Teller**

192-12-85-2410-1

15. This novelist released a detective story about Doc Sportello titled *Inherent Vice* in 2009. In one of his novels, a muted horn is used as a symbol for the postal service Trystero. That novel features Oedipa Maas uncovering a conspiracy and attending the title auction. Another of his novels begins, "A screaming comes across the sky," and concerns the relationship between Tyrone Slothrop and V-2 rockets. For 10 points, name this reclusive author of *The Crying of Lot 49* and *Gravity's Rainbow*.

ANSWER: Thomas **Pynchon**

015-12-85-24115

BONUS: The K-T boundary marks the end of what period, following the Jurassic, in which dinosaurs became extinct?

ANSWER: **Cretaceous** period

192-12-85-2410-1

16. This man wrote a “tone parallel” to the history of blacks in America called *Black, Brown and Beige*. In a short film, this man's wife Fredi Washington dances herself to death while his band plays his “Black and Tan Fantasy.” Billy Strayhorn composed the theme of his orchestra, “Take the A Train.” He wrote the piece that brought him worldwide fame while working in the Cotton Club. For 10 points, name this jazz pianist who composed “Mood Indigo.”

ANSWER: Edward “Duke” **Ellington**

121-12-85-24116

BONUS: What Jane Austen novel focuses on Willoughby's interactions with the emotional Marianne and her sister Elinor Dashwood?

ANSWER: ***Sense and Sensibility***

104-12-85-2410-1

17. Eighteen years before this event, a letter to Grand Duchess Christina of Tuscany laid out one side's position on Joshua 10:13. Legend has it that the subject of this event muttered "and yet it does move" at its end. It targeted a man who was warned by Cardinal Bellarmine and was accused of mocking Urban VIII. The accused recanted at this 1633 event, agreeing to live under house arrest. For 10 points, name this event in which the Roman Inquisition tried an Italian for his work in astronomy.

ANSWER: heresy **trial** of **Galileo** Galilei

104-12-85-24117

BONUS: Basketball legends Pete Maravich and Shaquille O'Neal played for what university whose football team is currently coached by Les Miles?

ANSWER: **Louisiana State** University [or **LSU**]

030-12-85-2410-1

18. A legend above this painting explains its meaning in Latin with the words "Causarum Cognitio (cog-NIT-ee-oh)." This painting sits in the Apostolic Palace, facing the same artist's *La Disputa* in the Stanza della Segnatura. The leftmost person in it is Zeno of Citium, and Diogenes lounges alone in blue on the steps in its center. For 10 points, identify this painting in which over twenty ancient philosophers congregate, for which contemporary painters were used as models by its creator, Raphael.

ANSWER: *The* **School of Athens**

019-12-85-24118

BONUS: What is the most populous city in Oregon?

ANSWER: **Portland**

080-12-85-2410-1

19. This author created a magician who realizes he is the dream of another when he walks unhurt into a wall of flame. Another character created by this author lives in a universe of hexagonal rooms containing 410-page books. This author of “The Circular Ruins” and “The Library of Babel” also wrote about the shooting of sinologist Stephen Albert by the German spy Yu Tsun. For 10 points, name this Argentinean author of *Ficciones*, which contains his story “The Garden of Forking Paths.”

ANSWER: Jorge Luis **Borges** (HOR-hay loo-EES BOR-hays)

014-12-85-24119

BONUS: Name the logical fallacy in which a proposition relies on an implicit, unsupported premise as proof of its own truth.

ANSWER: **begging the question** [or word forms; or **petitio principii**; or **hysteron proteron**]

020-12-85-2410-1

20. Some authorities assert that this object symbolizes the four exiles in Babylon, Persia, Greece, and Rome. It displays an acronym for the phrase "nes gadol hayah sham" (NESS gah-DOLE hi-AH SHAHM), meaning "a great miracle happened there." Depending on which letter is facing up, players of this object may contribute, do nothing, or take half or all of the pot. For 10 points, identify this top-like device which is used to play a traditional game on Hannukah.

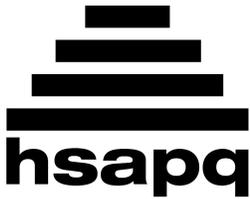
ANSWER: a **dreidel**

019-12-85-24120

BONUS: What document stipulated that no freeman would be tried outside the law of the land and was signed in 1215 at Runnymede by King John?

ANSWER: **Magna Carta**

153-12-85-2410-1



21. The Japanese noun "sunahama" is often translated as this English word, though it is more common in Japanese to use a word that literally refers to another place, the metonym "umi," to refer to these things. Many Romance languages trace their word for this place to a Latin noun meaning "stripe." In Russian, this place is called a "plyazh" (PLOSH), and it is "la plage" (PLOJ) in French and "la playa" (PLIE-uh) in Spanish. For 10 points, identify this place which might be found near "la mer" or "the sea."

ANSWER: "**beach**"

019-12-85-24121

BONUS: Name the author who created Brigid O'Shaughnessy, a woman who deals with Sam Spade, a detective who appears in this man's *The Maltese Falcon*.

ANSWER: Dashiell **Hammett** [or Samuel Dashiell **Hammett**]

192-12-85-2410-1

22. These animals can climb or escape tight spaces with the inefficient "concertina" movement. Some of these animals have pits between their eye and nostril that allow them to see the infrared radiation from prey. These organisms collect air particles on their tongue, which then hits Jacobson's Organ to allow them to smell. Their mobile jaw bones allow them to swallow prey larger than their heads. For 10 points, name these insidious reptiles that include pit vipers and cobras.

ANSWER: **snakes** [or **serpents**; or specific types, such as **vipers**; or **cobras**; or **pythons**; etc.; prompt on **reptiles**]

080-12-85-24122