



1. In 1843, Georg Carstensen started the amusement park found in this city called Tivoli Gardens. This city, the largest on the island of Zealand, is home to the "free town" Christiania. The Oresund Bridge connects this city to Malmo. Edvard Eriksen created a sculpture in this city's harbor of a woman seated on a rock. For 15 points, name this Scandinavian capital city that is connected by a bridge to Sweden, and whose statue of *The Little Mermaid* was inspired by Hans Christian Andersen.

ANSWER: Copenhagen [or Kobenhavn]

023-13-104-08101

BONUS: The poet and essayist Jose Marti (mar-TEE) is a national hero of what island?

ANSWER: Cuba

014-13-104-0810-11

2. A converted palace in this country serves as a part of its Hermitage Museum. An 85-meter tall statue of a woman with wings and a raised arm holding a sword located in this country is called "The Motherland Calls." In the sixteenth century, a cathedral was built in this country that now comprises nine chapels each topped with a colorful onion dome. For 15 points, name this country where St. Basil's Cathedral in Red Square is located, only a short distance from the Kremlin.

ANSWER: Russian Federation [or Rossiya; or Rossiyskaya Federatsiya]

023-13-104-08102

BONUS: What vector is defined as the shortest linear distance between two points?

ANSWER: displacement vector

014-13-104-0810-11

3. It's not Jude, Hebrews, or Revelation, but Martin Luther attempted to remove this book from canon, believing it contradicted the beliefs of sola gratia (GRAH-tee-uh) and sola fide (FEE-day). This book's second chapter contains the line, "faith without works is dead." This book also contains the guidelines for the anointing of the sick. For ten points, name this New Testament book, believed to have been written by a half-brother of Jesus.

ANSWER: Epistle of James

225-13-104-08103

BONUS: What simple device used to simulate computer algorithms consists of a strip of tape and a read-write head?

ANSWER: Turing machine

014-13-104-0810-11

4. This school won its first NCAA basketball championship in 1974 under Norm Sloan. This university plays the annual Textile Bowl against Clemson and plays in Carter Finlay Stadium. Russell Wilson transferred to the University of Wisconsin from this school, which was coached to the 1983 NCAA basketball championship by Jim Valvano. For 15 points, name this ACC school that is located in Raleigh and is nicknamed the Wolfpack.

ANSWER: North Carolina State University [or NC State; do not accept or prompt on "North Carolina" or "UNC"]

030-13-104-08104

BONUS: The Miller's Tale is the most famous example of what genre of ribald stories with a French name?

ANSWER: **fabliaux**

014-13-104-0810-11

5. A post-credit scene for this movie shows Hannibal Chau wondering where one of his gold-plated shoes has gone. Yancy's death leads the main character of this movie to work on a defensive wall. Hermann Gottlieb and Newton Geiszler are scientists who study certain creatures in this movie. Stacker Pentecost runs the Jaeger forces, which fight Kaijus in this movie. For 15 points, name this 2013 Guillermo del Toro movie in which large manned robots fight against giant extraterrestrial monsters.

ANSWER: **Pacific Rim**

023-13-104-08105

BONUS: What German philosopher wrote *Thus Spoke Zarathustra* and examined the Dionysian and Apollonian dichotomy in *The Birth of Tragedy*?

ANSWER: Friedrich **Nietzsche**

030-13-104-0810-11

6. A data structure used to efficiently perform this operation can use linear probing to implement open addressing or implement chaining to resolve collisions. That data structure used to perform this operation is a hash table. The linear, or serial, form of this operation simply steps through an array one item at a time while its binary form requires an array that has already been sorted. For 15 points, identify this operation in which an algorithm looks for a specified piece of data.

ANSWER: **searching** [or obvious equivalents, such as **lookup**; prompt on **hashing**]

066-13-104-08106

BONUS: What former governor of Kansas and current secretary of Health and Human Services has faced criticism for the shortcomings of the healthcare.gov website?

ANSWER: Kathleen **Sebelius** [or Kathleen **Gilligan**]

030-13-104-0810-11

7. Every entire function can be written as a power series with this property on the complex plane. A complete metric space is one where Cauchy sequences have this property. The Weierstrass M-test can show whether something has the uniform type of this property. Geometric series will always have this property if the common ratio has absolute value between zero and one, and the harmonic series does not possess it. For 15 points, name this opposite of divergence.

ANSWER: **convergence** [or **has a limit**]

121-13-104-08107

BONUS: This is a 20-second calculation question. If the base  $y$  logarithm of 64 equals  $3/2$ , what is  $y$ ?

ANSWER: **16**

003-13-104-0810-11

8. A director in this country was assassinated in 2004 for his film *Submission*, criticizing Muslim society. The VVD party currently leads this country, despite conflict with Geert Wilders's PVV party in 2012. This country's Princess Margriet was born in Canada during World War II. Operation Market Garden took place in Germany and this country, where the International Court of Justice and International Criminal Court are headquartered. Two days after World War II ended, Indonesia declared independence from this country. For 15 points, name this country where Queen Beatrix abdicated in 2013.

ANSWER: Kingdom of the **Netherlands** [or **Holland**; or Koninkrijk der **Nederlanden**]

190-13-104-08108

BONUS: What type of goods named after an American economist are favored at high prices due to their symbol as high-status commodities?

ANSWER: **Veblen** goods

227-13-104-0810-11

9. Sonia Johnson was excommunicated by the Mormon church for supporting this initiative, which is the subject of the legally controversial "three-state strategy." Five states which ratified this law re-voted to rescind ratification in the subsequent years. This initiative was campaigned against by the Eagle Forum of Phyllis Schlafly, and this amendment's text was written by Alice Paul in 1923, even though it picked up support in the 1970s. For 15 points, identify this bill outlawing all discrimination based on sex, which fell just short of becoming a Constitutional amendment.

ANSWER: the **ERA** [or **Equal Rights** Amendment]

019-13-104-08109

BONUS: Name the country that shares the Gobi Desert with its neighbor China.

ANSWER: **Mongolia** [or **Mongol Uls**]

023-13-104-0810-11

10. In one novel by this author, a woman decides to go to the Remembrance Week boat races instead of immediately arranging for the burial of her dead husband. In that novel by him, the note "done because we are too menny" is left by Little Father Time, who kills his two brothers and hangs himself. In an only slightly-less-dreary novel by this author, the title character is replaced by his Scottish competitor Donald Farfrae soon after auctioning off his own wife and daughter. For 15 points, name this novelist who wrote *Jude the Obscure* and *The Mayor of Casterbridge*.

ANSWER: Thomas **Hardy**

020-13-104-08110

BONUS: Students of what language use the acronym DR. and MRS. VANDERTRAMP to memorize verbs that are conjugated in *passé composé* with "être" and not "avoir?"

ANSWER: **French** language [or le **français**; or la langue **française**]

153-13-104-0810-11

11. In one of this man's stories, a husband calls roadside diners "dog-wagons" to annoy his wife, who insults his driving ability in turn, as they drive out to grab "A Couple of Hamburgers." With E.B. White's help, this writer joined the editorial staff of *The New Yorker*, where he sometimes published his threadbare cartoons illustrating interactions between couples. A man faces a firing squad and pilots a two-person fighter jet in his most famous story, about an average man with crazy daydreams. For 15 points, name this humorist who wrote "The Secret Life of Walter Mitty."

ANSWER: James **Thurber**

020-13-104-08111

BONUS: This is a 20-second calculation question. What is the expected number of heads that show up in three independent tosses of an unfair coin that shows heads 60% of the time?

ANSWER: **1.8** [or **9/5**]

003-13-104-0810-11

12. The protein Cdc20 is not activated until the start of this stage. The cyclosome is also known as a complex that promotes this stage by breaking down securin. This stage occurs due to the removal of tubulin monomers from the "plus" end of a microtubule by the kinetochore (kin-ET-oh-core). Errors in this phase of mitosis can lead to Down's Syndrome and other nondisjunctions. For 15 points, name this stage of mitosis in which sister chromatids are segregated to opposite sides of the cell and which occurs between metaphase and telophase.

ANSWER: **anaphase** [prompt on **mitosis** until it is read]

190-13-104-08112

BONUS: This is a 20-second calculation question. Segment BC is a diameter of circle O and A is a point on the circumference of O. If the ratio of the measure of angle ABC to that of angle ACB is 2, what is the measure of angle ABC?

ANSWER: **60** degrees [or **pi over 3** radians]

003-13-104-0810-11

13. In a story by this author, Boris's prioress aunt arranges his marriage and turns out to have switched places with her pet monkey. In another, a woman flees Paris with only a lottery ticket to become the maid of two elderly Norwegians. Her collection *Anecdotes of Destiny* contains stories like "Babette's Feast." This writer's memoirs describe life on a Kenyan coffee plantation before she returned to Denmark. For 15 points, name this author of *Out of Africa* and *Seven Gothic Tales*.

ANSWER: Isak **Dinesen** [or Karen **Blixen**]

121-13-104-08113

BONUS: What artist created controversy over the exhibition of his paintings *Olympia* and *Luncheon on the Grass*?

ANSWER: Edouard **Manet**

140-13-104-0810-11

14. A Shinto goddess of this object was the sister of Susanoo and Tsukiyomi and was named Amaterasu. Another god of this object had to defeat the evil serpent Apep every day as he passed through the underworld; that god of this object was at one point combined with the god Amun. A third god of this object had a son named Phaeton lose control of his light-bringing chariot. For 15 points, name this astronomical object whose representative gods included the Egyptian Ra and Greek Helios.

ANSWER: **Sun** gods [or **solar** gods]

023-13-104-08114

BONUS: What princess of Hyrule titles a video game series in which she is often saved from Ganondorf by Link?

ANSWER: **Zelda**

023-13-104-0810-11

15. The use of these drugs during pregnancy correlates with persistent pulmonary hypertension in newborns. Suddenly stopping the use of one of these drugs can cause "zaps" as part of their namesake discontinuation syndrome. Like tricyclics, these drugs can be used to treat obsessive-compulsive disorder. Drugs in this class include fluoxetine and paroxetine. For 15 points, name this class of drugs which inhibit the removal of a certain neurotransmitter from the synapse and are used to treat depression.

ANSWER: **SSRIs** [or **selective serotonin reuptake inhibitors**; or **serotonin-specific reuptake inhibitors** ]

048-13-104-08115

BONUS: What leader of Israeli forces in the 1948 Arab-Israeli War served as the first prime minister of Israel?

ANSWER: David **Ben-Gurion**

015-13-104-0810-11

16. This artist painted *San Giorgio Maggiore (MUH-jor-ay) at Dusk* during his 1908 trip to Venice. Louis Leroy mocked this artist's painting of a boat completely in black rowing toward the shore, illuminated by a very bright orange sun. In two series, he painted the Houses of Parliament and the Rouen (WOO-ahn) Cathedral at different times of day. This artist painted *The Japanese Bridge* near his home in Giverny (JIV-air-nee). His popular subjects included poplars and haystacks. For 15 points, name this painter of *Impression, Sunrise* and many depictions of water-lilies.

ANSWER: Claude **Monet**

190-13-104-08116

BONUS: This is a calculation question. If a line in the plane has slope negative three, what is cosine of the angle it makes with the x-axis?

ANSWER: **1 over square root of 10** [or square **root of 10, over 10**]

233-13-104-0810-11

17. The influence of this group increased when Peter Porter took over the House Committee on Foreign Affairs and Langdon Cheves became the chairman of the House Ways and Means Committee. John Randolph coined this term, which denoted a group of politicians from Southern and Western states. Some elements of this faction, led by Henry Clay, agitated for an invasion of Canada. For 15 points, identify these Democratic-Republicans who convinced James Madison to enter a conflict with Britain in 1812.

ANSWER: war **hawks**

020-13-104-08117

BONUS: Identify the George Gerswhin opera set in "Catfish Row" of Charleston, South Carolina, which includes the songs "It Ain't Necessarily So" and "Summertime" performed by an exclusively black cast of major characters.

ANSWER: **Porgy and Bess**

019-13-104-0810-11

18. Sir Thomas Wyatt translated some of these poems written by Ronsard into English. Sir Philip Sydney's *Astrophel and Stella* is a sequence of this kind of poem. A collection of these kinds of poems "from the Portugese" was written by Elizabeth Barrett Browning, and an author who wrote one hundred fifty-four of these kinds of poems addressed some to the "Dark Lady." Shakespeare's poems of this kind include "Shall I Compare Thee to a Summer's Day?" For 15 points, name this type of poem that consists of fourteen lines.

ANSWER: **sonnets**

186-13-104-08118

BONUS: Name the national monument in South Dakota that was built by Gutzon Borglum.

ANSWER: Mount **Rushmore**

023-13-104-0810-11

19. This politician made a gaffe by saying no one was the "suppository of all wisdom." In a 2009 leadership ballot, he beat Malcolm Trumbull to become Opposition Leader, a role in which he was accused of misogyny by Julia Gillard. In his country's September 2013 election, he led the Liberal-National Coalition to victory over Kevin Rudd's Labor Party. For 15 points, name this current Prime Minister of Australia.

ANSWER: Anthony John "Tony" **Abbott**

153-13-104-08119

BONUS: What name is given to the area around the equator characterized by weak winds, which was called the doldrums by sailors?

ANSWER: **ITCZ** [or **Intertropical Convergence Zone**]

014-13-104-0810-11

20. Leonard Glen Francis is accused of bribing senior intelligence officials in this organization. In an attack on Barawe, this organization failed to capture Abdulkadir Mohamed Abdulkadir, an Al-Shabaab leader. That assault was carried out by the same unit that descended on Abottabad in 2011 to kill Bin Laden. For 15 points, name this branch of the United States military whose special forces are the SEALs.

ANSWER: United States **Navy** [or **USN**; prompt on United States **military** and equivalents]

153-13-104-08120

BONUS: This is a calculation question. If  $f$  of  $x$  equals " $2x$  plus  $7$ " and  $g$  of  $y$  equals " $y$  squared minus  $4$ ", then what is  $f$  of  $g$  of  $7$ ?

ANSWER: **97**

003-13-104-0810-11

21. This statement will be tested in late 2014 by the French project MICROSCOPE, which intends to set even lower limits on the Eotvos (ET-vish) parameter. One version of this statement includes local Lorentz invariance and local positional invariance. A less rigorous version of it holds that the ratio of mass to weight is locally constant, and includes the universality of free fall. For 15 points, name this principle stating that uniform acceleration and the effects of a gravitational field are indistinguishable.

ANSWER: **equivalence** principle [or weak **equivalence** principle; or strong **equivalence** principle; or Galilean-Newtonian **equivalence** principle; or Einstein **equivalence** principle; or **universality of free fall** until it is read]

003-13-104-08121

BONUS: What Nazi Field Marshal was known as the Desert Fox for his tank warfare tactics in the North African theater of World War II?

ANSWER: Erwin **Rommel**

015-13-104-0810-11

22. An author from this nation wrote a poem whose title action takes place "at five in the afternoon"; that author also created characters such as Angustias, Pepe el Romano, and the Bridegroom. Those characters from this nation appear in *The House of Bernarda Alba* and *Blood Wedding*. Another character created by an author from this nation falls in love with Dulcinea and battles windmills. For 15 points, identify this home nation of Federico Garcia Lorca and Miguel de Cervantes.

ANSWER: Kingdom of **Spain** [or Reino de **España**]

226-13-104-08122

BONUS: What Chilean island is known for its moai (MOH-eye) statues?

ANSWER: **Easter** Island [or **Rapa Nui**; or Isla de **Pascua**]

023-13-104-0810-11

23. When cells in this tissue die, they are surrounded by macrophages forming a crown-like structure. A side effect of HIV protease inhibitors is a redistribution of this tissue. It's not bone marrow, but the stromal vascular fraction of this tissue is a great source of mesenchymal stem cells. This type of tissue produces leptin and is divided into white and brown types. It is also known as adipose tissue. For 15 points, name this type of connective tissue which stores lipids.

ANSWER: body **fat** tissue [or **adipose** tissue until it is read]

048-13-104-08123

BONUS: What language is written in the "hangul" alphabet derived by King Sejong?

ANSWER: **Korean**

019-13-104-0810-11

24. This short story features a secret which is found out by "gold, and the power of a woman's will." Its main character is accused of romancing the daughter of his "semi-barbaric" king. In this short story, the princess tells the main character to choose the right-most option in a ceremony which will end in either death or marriage to another woman for the protagonist. For 15 points, name this short story by Frank R. Stockton in which two identical doors conceal the title options.

ANSWER: "The **Lady, or the Tiger?**"

088-13-104-08124

BONUS: What beast did Bellerophon kill for King Iobates, with the help of Pegasus and a leaden spear?

ANSWER: **Chimera**

190-13-104-0810-11

25. A woman in this play listens to a recording of the Varsouviana that always ends with a gunshot, reminding her of the suicide of her closeted gay husband, Allan Grey. This play is set in the Elysian Fields, where a woman recently arrived from Laurel enters into a relationship with Mitch. In this play, a Southern aristocrat who has lost her plantation, Belle Reve, is disgusted to find her sister Stella married to a "brute." For 15 points, name this Tennessee Williams play about Blanche DuBois's conflicts with Stanley Kowalski.

ANSWER: A **Streetcar Named Desire**

080-13-104-08125

00--20-0810-11

26. This state has the largest sea cave in the United States, which has a two-hundred-foot elevator down to its lookout to watch Steller sea lions. This state is the westernmost of the two states that do not allow most drivers to pump their own gas. A 125-foot column inspired by Trajan's column is located in this state's city of Astoria. The Phantom Ship and Old Man of the Lake are both located in this state, where a caldera filled with water, creating Crater Lake. For 15 points, name this state in the Pacific Northwest where the Willamette Valley was the end of a namesake pioneer trail.

ANSWER: **Oregon**

023-13-104-08126

00--20-0810-11



27. Ella Fitzgerald met her second husband while on tour with this man's band. This musician had to leave Cab Calloway's band after attacking him with a switchblade. Chano Pozo played the drums on some of his Afro-Cuban pieces, like "Manteca." He composed such jazz standards as "Groovin' High" and "Salt Peanuts." This composer of "A Night in Tunisia" helped establish bebop along with Charlie Parker. He was known for his glasses and puffed-up cheeks. For 15 points, name this jazz musician most famous for his bent trumpet.

ANSWER: John Birks "Dizzy" Gillespie

080-13-104-08127

00--20-0810-11

28. The *Heliconius* genus of these organisms exhibits convergent evolution of warning signals that is typical of both Batesian and Mullerian mimicry. These Lepidopterans have long antennae that resemble a slender club. The pupal stage of these organisms is spent in a chrysalis. A species of these organism that feeds on milkweeds is famous for migrating from Canada to Mexico and is the monarch. For 15 points, identify these winged creatures that emerge from a caterpillar's cocoon, like moths.

ANSWER: butterfly [or butterflies]

066-13-104-08128