



1. The text of the Monroe Doctrine was mainly authored by this man while he was Secretary of State. This man won an election that included William Crawford as a candidate. He is the only President to follow his time in office by serving in the House of Representatives. Henry Clay agreed to serve as the Secretary of State for this President, in return for swinging the election of 1824. For 10 points, name this man who used the "Corrupt Bargain" to defeat Andrew Jackson and was the first son of a President to hold the office.
ANSWER: John Quincy Adams [prompt on Adams; do not accept "John Adams"]

023-13-96-03101

2. A character in this opera insists, "L'amour, l'amour t'attend" in an aria beginning "Votre toast." Act III of this opera takes place at a smuggler's camp in the mountains. In Act I of this opera, a worker in a cigarette factory throws a flower to her eventual lover, but explains that love is a "rebellious bird" in her Habanera (hah-bahn-AIR-uh) aria. This opera's most famous aria is sung by Escamillo (ess-cah-MEE-yoh), a toreador who wins the love of a Spanish gypsy. For 10 points, name this opera composed by Georges Bizet.
ANSWER: Carmen

190-13-96-03102

3. This conflict saw the last sitting British monarch lead an army in battle, which occurred at Dettingen. The first major clash in this conflict occurred at the battle of Mollwitz. Frederick the Great had promised one side in this war neutrality if part of Silesia was given to Prussia, but that solution was rejected by a Hapsburg monarch. This war ended in 1748 with the treaty of Aix-la-Chapelle (EYE-lah-shuh-PELL). For 10 points, name this war sparked by the Pragmatic Sanction's elevation of Maria Theresa to the throne.
ANSWER: War of the Austrian Succession

230-13-96-03103

4. A man in this novel is seen at night walking with a candle into an empty room to signal that food has been left for a convict. This novel's epilogue reveals that "Vandaleur" embezzled money in Costa Rica. This novel reveals that a butterfly-obsessed man named Jack Stapleton kidnapped his own wife and used phosphorus to evoke the frightening appearance of a legendary monster that supposedly killed Sir Charles in a moor. For 10 points, name this Sherlock Holmes novel whose culprit was not, in fact, the title dog.
ANSWER: *The* Hound of the Baskervilles

020-13-96-03104

5. A Middle Ages trade route in this country was changed in 1950 into a 210-mile scenic drive called the Romantic Road. This country's largest amusement park is called Europa-Park. The capital of this country is home to Museum Island, which includes the Pergamon Museum. This country was where one of the first cuckoo clocks was made; that occurred in its Black Forest. For 10 points, name this country that inspired Sleeping Beauty's Castle with its Bavarian Neuschwanstein (noish-VON-shtein) Castle.
ANSWER: Federal Republic of Germany [or Bundesrepublik Deutschland]

023-13-96-03105

6. The Chinese creator gods Fuxi (FOO-shee) and Nuwa are sometimes depicted with the body parts of these creatures. Cadmus and Harmonia took the form of these creatures at the end of their lives. Tiresias was turned into a woman upon attacking two of them mating. The caduceus depicts two of these animals, as does the rod of Asclepius. One of these animals resided at Delphi and was slain by Apollo. For 10 points, name this animal, mythological ones of which include Python.

ANSWER: **snake** [or **serpents**; or **dragons**]

140-13-96-03106

7. Patients that have alkaptonuria excrete urine with this color. Manganese dioxide and silver sulfide are both this color. Rapidly water-cooled rhyolitic flows form a glass with this color. An astronomical object named for this color can be described by charge, mass, and spin according to the no-hair theorem. The gravity of that object is impossible to escape at sub-luminal speeds within the event horizon. For 10 points, identify this color which absorbs all light that shines upon it, unlike white.

ANSWER: **black** [or **black** holes; or **black** urine disease]

239-13-96-03107

8. A series of bombings in this country occurred during the "Hot Summer" and were triggered by the influx of "retornados." The song "And After the Farewell" was the signal to begin a revolution in this country, which was led by the MFA and overthrew Marcelo Caetano. This country was led by Antonio Salazar's Estado Novo, and during its liberalization, its colonies in Mozambique and Goa achieved independence. For 10 points, name this country whose autonomous regions include Madeira and the Azores.

ANSWER: **Portugal**

048-13-96-03108

9. This philosophical school was referred to as a "new name for some old ways of thinking" in a book written by the author of "What is an Emotion?" Many proponents of it were members of the Metaphysical Club. Texts written by proponents of this school include "How to Make Our Ideas Clear," *The Varieties of Religious Experience*, and *Democracy and Education*. For 10 points, name this philosophical school practiced by Charles Sanders Peirce (PURSE), William James, and John Dewey, which values practical action.

ANSWER: **pragmatism**

052-13-96-03109

10. This character insults a "miserable, tub-trading" group of people as "sniveling cowards with their longbows and black arrows." This character was wounded by Girion, a ruler of Dale, whom he then killed. Another character talks to this creature and calls him "the Stupendous" and "the Unassessably Wealthy." At the end of a 2013 film, this creature, voiced by Benedict Cumberbatch, leaves Lonely Mountain and heads toward Lake Town. For 10 points, name this dragon whose "Desolation" subtitles the second movie in *The Hobbit* series.

ANSWER: **Smaug**

023-13-96-03110

11. A graph-searching method that implements one of these data structures minimizes the number of nodes visited, and is called breadth-first search. Circular buffers and linked lists are typically implemented using this type of data structure. Dijkstra's (DYKE-strah's) algorithm uses their priority type. A deque (DECK) is a double-ended one of these structures. They store data such that the first element inserted is the first element removed. For 10 points, name this data structure which resembles a ticketing line.

ANSWER: **queue**

190-13-96-03111

12. Several characters in this play appear in a 2010 sequel by Bruce Norris. A character in this play entertains going into business with Bobo, and the role of Mrs. Johnson is eliminated in some stagings of this play. Karl Linder attempts to talk several characters against moving into Clybourne Park in this play, in which the Nigerian student Joseph Asagai is one of Beneatha's suitors. Walter dreams of owning a liquor store in this play. For 10 points, name this play about the travails of the Younger family, a work by Lorraine Hansberry.

ANSWER: A ***Raisin in the Sun***

030-13-96-03112

13. This statement can be derived by applying Gauss's law to a spherical surface. One constant in this law is often rewritten as one over four pi times the permittivity of free space, and dividing it by charge gives the electric field of a point charge. The constant of proportionality for this statement is symbolized k, and its value is equal to nine times ten to the nine. It states that force is proportional to the inverse-square of distance. For 10 points, name this statement that gives the electrostatic force between two charges.

ANSWER: **Coulomb's** law

226-13-96-03113

14. At the beginning of this novel, an old man spreads gossip about a young woman lying on the back of a red-dleman's wagon, after which it is found that she ran away before her marriage. The marriage of Wildev and Thomasin is facilitated early in this novel. The title character's mother dies of snakebite in this novel, followed soon by his wife Eustacia Vye, who drowns while trying to escape rural life. For 10 points, name this novel that describes Clym Yeobright's arrival in his hometown of Egdon Heath, a work by Thomas Hardy.

ANSWER: *The **Return of the Native***

140-13-96-03114

15. The competition for designing what became this monument was overseen by George Howe. This monument was built by the MacDonald Construction Company and used the Pittsburgh-Des Moines Steel Company for its stainless steel exterior. This monument was one of the first solo designs done by Finnish architect Eero Saarinen. Underneath this monument is the Museum of Westward Expansion. For 10 points, name this 630-foot tall and 630-foot wide catenary arch located next to the Mississippi River in St. Louis.

ANSWER: **Gateway** Arch

023-13-96-03115



1A. What American river runs past the city of Lake Havasu and through the Grand Canyon?

ANSWER: **Colorado** River

1B. What curve names a class of galaxies lying on the fork of Hubble's sequence and has a variety named for Archimedes?

ANSWER: **spiral**

2A. In statistics, what name is given to the default hypothesis which states that no relationship exists between two measured variables and which the experimenter seeks to reject?

ANSWER: **null** hypothesis [or **H naught**; or **H sub zero**]

2B. What English chemist was the first to isolate oxygen, which he termed "dephlogisticated air"?

ANSWER: Joseph **Priestley**

3A. This is a 20-second calculation question. What number is in the top-left corner of the inverse of the matrix whose first row is [4 5] and whose second row is [2 3]?

ANSWER: **1.5** [or **3/2**; or **1½**]

3B. This is a 20-second calculation question. Convert the polar coordinates "r = 4, theta = 3 pi over 4" to rectangular coordinates.

ANSWER: (-**2** times the square **root** of **2**, **2** times the square **root** of **2**) [or x = **-2 root 2**, y = **2 root 2**]

4A. What Pope was replaced by Pope Francis after stepping down in 2013?

ANSWER: **Benedict XVI** [or Joseph Aloisius **Ratzinger**; prompt on **Benedict**]

4B. What American singer-songwriter has recorded the hits "Grenade," "The Lazy Song," and "Locked Out of Heaven"?

ANSWER: Bruno **Mars**

5A. What Swiss psychiatrist speculated about the existence of universal archetypes in what he called the "collective unconscious?"

ANSWER: Carl **Jung**

5B. What early English novelist wrote *Captain Singleton* and *Moll Flanders*?

ANSWER: Daniel **Defoe**

6A. What difficult set of nineteen solo piano compositions by Franz Liszt incorporates elements of his native country's music?

ANSWER: **Hungarian Rhapsodies**

6B. What lengthy retreat across China was performed by Mao Zedong's Red Army from 1933 to 1935?

ANSWER: **Long March**

7A. What mountain range that runs along the Mediterranean coast of Northern Africa has its highest point at Toubkal (toob-KAHL)?

ANSWER: **Atlas** Mountains

7B. What Shoshone (shuh-SHOW-nee) woman served as a translator and guide for the Lewis and Clark Expedition?

ANSWER: **Sacajawea**

8A. What female impressionist painted *The Child's Bath* and *The Boating Party*?

ANSWER: Mary **Cassatt**

8B. In May of 2013, mayor Dave Bing announced that what American city was forced to declare bankruptcy?

ANSWER: **Detroit**

9A. This is a 30-second calculation question. Two adjacent angles in a parallelogram have measures “ $x + 20$ ” degrees and “ $4x - 40$ ” degrees. What is the measure of the larger angle?

ANSWER: **120** degrees

9B. This is a 30-second calculation question. A bag has ten ping pong balls in it, numbered one through ten inclusive. Three people each draw a ball from the bag without replacement. What is the probability that each of them drew an odd number?

ANSWER: **1/12**

10A. What eighteenth-century British empiricist denied the existence of miracles in a section of his treatise *An Enquiry Concerning Human Understanding*?

ANSWER: David **Hume**

10B. What is the name given to the glass tube with a stopcock at the bottom that is used to dispense one solution into another during titration?

ANSWER: **burette**



1. cAMP (CAMP) and a cyclic nucleotide with this nucleobase are important secondary messengers. A nucleoside triphosphate with this nucleobase is one of the outputs of the citric acid cycle; that triphosphate is converted to ATP by NDK. This purine has an oxygen attached to its pyrimidine ring. Three hydrogen bonds connect this nucleobase to cytosine. For 10 points, name this nucleobase represented with a G.
ANSWER: guanine [or G until it is read]

066-13-96-03117

2. This disease was the subject of a scandal discussed in *The Drum* and exposed by Peter Buxtun. A 1972 expose by the *Washington Star* discussed 399 men with this disease, which spurred the passage of the National Research Act of 1974 and the rise of institutional review boards. This disease was given to Macon County sharecroppers who were told they had "bad blood" and denied penicillin. For 10 points, name this disease, the subject of an unethical study on black men conducted at the Tuskegee Institute.
ANSWER: sypillis

019-13-96-03118

3. Near the end of this novel, Sister Gudule (goo-DOOL) discovers that she is the mother of a woman about to be executed for murdering Captain Phoebus. A goat named Djali accompanies a major character in this novel. Claude Frolo raises this novel's title character and becomes obsessed with a gypsy named La Esmerelda. The title character of this novel is elected "Pope of Fools" at the beginning for being the ugliest person in Paris. For 10 points, name this Victor Hugo novel about Quasimodo, a bellringer in the title cathedral.

ANSWER: *The Hunchback of Notre Dame* [or *Notre-Dame de Paris*]

080-13-96-03119

4. In a scene in this play, a character pulls the trigger of a gun which shoots an umbrella. Another character in this play claims that he married his wife due to her hysterical pregnancy. A character in this play claims that his son was killed in a car accident while attempting to avoid a porcupine. Absurd games such as "Humiliate the Host" and "Get the Guests" are played throughout this play. For 10 points, name this play in which Nick and Honey visit Martha and George, written by Edward Albee.

ANSWER: *Who's Afraid of Virginia Woolf?*

227-13-96-03120

5. Eustace of Boulogne tried to convince a commander during this battle to retreat right before Eustace was severely wounded. The victors of this battle pursued the other side into the Malfosse. During this battle, a defensive position was taken by the eventual losing side on Senlac Hill. The winning commander of this battle used fake retreats to draw soldiers out, and the losing commander may be depicted dying from an arrow to the eye on the Bayeux Tapestry. For 10 points, name this battle lost by Harold Godwinson to the Normans under William the Conqueror in 1066.

ANSWER: Battle of Hastings

023-13-96-03121

6. The protagonist of this book is chided for reading a book of birds with Arctic scenes. It ends by describing the fate of a man who proposed to the protagonist and is dying as a missionary in India. The protagonist goes to live with St. John Rivers and his sisters after leaving her employer at Thornfield Hall. Thornfield is eventually burned down by her employer's crazy wife, Bertha Mason. For 10 points, name this novel by Charlotte Brontë, whose title character marries Mr. Rochester.

ANSWER: Jane Eyre

121-13-96-03122

7. This indicative tense's third-person plural conjugation is the basis of the subjunctive forms in another tense. The third-person singular conjugation in this Spanish verb tense adds a "y" when the verb has two consecutive vowels. Verbs that end in "-car" replace the "c" with a "q" in the first person in this tense. In this tense, the verbs "ser" and "ir" (EAR) are conjugated the same: "fui," (FWEE) "fuiste," (FWEE-stay) "fue," (FWAY) and so on. This tense should be used only if the action was completed. For 10 points, name this past tense in Spanish contrasted with the imperfect tense.

ANSWER: Spanish **preterite** [or el **preterito**; do not accept or prompt on "past"]

190-13-96-03123

8. Structures created by this phenomenon are known as ventifacts. A type of transport via this phenomenon is known as saltation. This phenomenon is the primary driving force behind surface ocean currents. The Beaufort scale is used to classify this phenomenon based on observed sea conditions. This phenomenon is responsible for creating aeolian landforms, such as dunes and sand-blasted rocks. For 10 points, name this phenomenon that results from the uneven heating of Earth's surface

ANSWER: **wind**

066-13-96-03124

9. This poem begins with the word "Andra," meaning "the man." The protagonist of this poem angrily reminds Eurycleia (yur-uh-CALY-uh) that he built his bridal bed around the immobile stump of an olive tree. On Phaeacia (fye-EY-kih-uh), the protagonist of this poem tells Nausicaa's father of his encounters with the Laestrygonians (LYE-struh-GOH-nee-unz) and Lotus Eaters. At the beginning of this poem, Athena takes the form of Mentor to guide Telemachus, who is angry at the suitors of his mother, Penelope. For 10 points, name this poem about a Greek king's return from Troy to Ithaca.

ANSWER: *The **Odyssey***

080-13-96-03125

10. A difference of opinion exists between using "qabd" (KAH-bid) or "sabl" (SAH-dil) positioning during one portion of this action. This action is immediately preceded by an optional "iqama" (EE-kah-mah), and one ends it by performing "tasleem" on at least one side of the body. Examples of this action include "fajr" (FAH-jur), which is performed after "suhor" and before sunrise during Ramadan. Each "rak'ah" of this action begins with a declaration of "Allahu Akbar." This action is the second pillar of Islam. For 10 points, identify this action which is performed five times a day by Muslims.

ANSWER: daily **prayer** [or word forms; or **salaah**; or **salaat**; or **dhuhr** until "fajr" is read; or **asr** until "fajr" is read; or **maghrib** until "fajr" is read; or **isha** until "fajr" is read; or **fajr** until it is read]

189-13-96-03126

11. 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 10 points, name this type of poem that consists of fourteen lines.

ANSWER: **sonnets**

186-13-96-03127

12. 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 10 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**]

048-13-96-03128

13. This man was friends with his rival Luz Long, whom this man defeated to win the long-jump. This man set or tied four world records in less than an hour while running for Ohio State at the Big Ten track and field championships, and some of his feats were shown in Leni Riefenstahl's documentary *Olympia*. For 10 points, name this African-American track and field athlete whose four gold medals at the 1936 Berlin Olympics thwarted Hitler's attempt to demonstrate Aryan superiority.

ANSWER: Jesse **Owens**

030-13-96-03129

14. A character in this novel refuses to lie down on the bottom of a boat because it goes against his military training. General Webb is the incompetent commander of Fort Edward in this novel, and much of it centers on Major Duncan Heyward's journey to take the Munro sisters to their father at Fort William Henry. Magua is shot at the conclusion of this book, in which Uncas is the title character. For 10 points, name this novel in which Natty Bumppo is known as Hawkeye, a work by James Fenimore Cooper.

ANSWER: *The **Last of the Mohicans***

030-13-96-03130

15. The severity of this disease is measured on the EDSS scale. A classic symptom of this disease is Lhermitte's (LARE-meet's) sign. Its treatments includes a random polymer of four amino acids called glatiramir acetate, which shifts the Th1 response to a Th2 response. Oligodendrocytes are lost in this disease, which can be diagnosed by looking for white matter plaques on MRI. For 10 points, name this autoimmune disease which destroys the myelin sheaths surrounding neurons.

ANSWER: **multiple sclerosis** [or **MS**]

048-13-96-03131



1. 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 10 points, name this type of connective tissue which stores lipids.

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

048-13-96-03132

2. Eight men died trying to end this event in Operation Eagle Claw. Frank Reynolds was the original host of a show started during this event; that show, later hosted by Ted Koppel, was ABC's *Nightline*. Six people escaped this event thanks to the Canadian Caper. This event was ended minutes after the inauguration of Ronald Reagan. For 10 points, name this event during the Carter administration that lasted for 444 days and included fifty-two Americans being held against their will in Tehran.

ANSWER: **Iran hostage** crisis

023-13-96-03133

3. These objects are roughly 1.5 times as common as their counterparts among substances in the hypothetical "island of stability". These particles, which consist of two down quarks and an up quark, release an antineutrino when they decay, which happens with a half-life of about 10 minutes. Discovered by James Chadwick in 1932, they contribute to the mass number, but not the atomic number, of an element. For 10 points, name this elementary particle with no electric charge, found in the nucleus along with the proton.

ANSWER: **neutron**

132-13-96-03134

4. A way to find this value is to take the sum of the first ionization energy and electron affinity and divide by two. The Allen scale for finding this value has its lowest end at cesium, which differs from a more common scale for this value that gives its lowest value, 0.7, to francium. That common scale for this value assigns its highest value, 3.98, to fluorine and is named for Linus Pauling. A large difference in this value between molecules usually results in an ionic bond. For 10 points, name this ability of atoms to attract shared electrons.

ANSWER: **electronegativity**

023-13-96-03135

5. This man wrote a poem about poetry with the section "It Must Be Abstract," entitled *Notes Toward a Supreme Fiction*. "The wilderness rose up to" the title object of one of his poems, causing the wilderness to become "no longer wild." In addition to that poem about an object "like nothing else in Tennessee," this man wrote a poem that begins, "Call of the roller of big cigars," and states, "Let be be finale of seem." For 10 points, name this American poet who wrote "Anecdote of the Jar" and "The Emperor of Ice Cream."

ANSWER: Wallace **Stevens**

030-13-96-03136

This is a calculation question. You roll two N-sided dice, with faces numbered one through N. What is the smallest value of N for which the expected value of the dice's sum is greater than 6?

ANSWER: **6**

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

ANSWER: **displacement** vector