



1. This form follows clauses such as "dudar que" (doo-DAR kay) and "en cuanto (en QUAN-toe)" in impersonal expressions. When creating this verb form, an indicative verb whose infinitive form ends in "c-a-r" changes the "c" to "q-u" before "e." Regular "-ir" verbs take endings that start with "a" and "-ar" verbs take endings that start with "e" in this mood. For 15 points, identify this Spanish verb mood that is also used to express doubt, uncertainty, and other situations not described by the indicative mood.

ANSWER: Spanish subjunctive mood [or subjuntivo]

019-12-85-16101

BONUS: Which invertebrate phylum, whose members exhibit radial symmetry, includes sea cucumbers and starfish?

ANSWER: echinodermata [or echinoderms]

189-12-85-1610-1

2. Square matrices for which this operation is defined have linearly independent columns. A statement with this kind of relationship to a conditional statement is logically equivalent to the converse and can be stated as, "if not a, then not b." Exponential and logarithmic functions have this relation, as do, over a certain domain and range, the sine and arcsine functions. One third is one type, for three, while negative four is another type, for four. For 15 points, name this mathematical term that includes multiplicative and additive ones.

ANSWER: inverse

131-12-85-16102

BONUS: Name the abolitionist supported by the Secret Six who organized the Pottawatomie Massacre.

ANSWER: John Brown

186-12-85-1610-1

3. One holder of this position, Cosmo Gordon Lang, was attacked in a doggerel as "Old Lang Swine" for scathing comments made following the abdication of Edward VIII. The current holder of this position did not invite Eugene Robinson to the 2008 Lambeth Conference; that current holder of this position, Rowan Williams, is scheduled to retire at the end of 2012. A man named Saint Augustine was the first to hold this position, which has also been held by Thomas Beckett. For 15 points, name this position held by the foremost bishop of the Anglican Communion.

ANSWER: Archbishop of Canterbury

030-12-85-16103

BONUS: What author wrote about the religious experience of John Grimes in *Go Tell It on the Mountain*?

ANSWER: James Baldwin [or James Arthur Baldwin]

088-12-85-1610-1

4. Much of the information about this man comes from the journal of the Italian Antonio Pigafetta. This man was replaced by his lieutenant Juan Sebastian Elcano after dying in the Battle of Mactan. He discovered and named a strait between Tierra del Fuego and the mainland. After this man was killed in the Philippines, his crew rounded the Cape of Good Hope and returned to Charles I of Spain. For 15 points, name this Portuguese explorer who led the first circumnavigation of the earth.

ANSWER: Ferdinand Magellan [or Fernao de Magalhaes; or Fernando de Magallanes]

015-12-85-16104

BONUS: What powerful, anti-American president of Venezuela sought treatment for cancer once again in December 2012?

ANSWER: Hugo **Chavez** Frias

104-12-85-1610-1

5. In one play by this author, a man is barricaded in his house by a group of slaves due to his addiction to the law court. This author of *The Wasps* also wrote a play in which the title creatures construct a city in the sky called Cloud Cuckoo Land. In another of his plays, a sex strike is organized by the women of Sparta and Athens to end the Peloponnesian War. For 15 points, name this ancient Greek comic playwright of *The Birds* and *Lysistrata*.

ANSWER: **Aristophanes** (air-ih-STAHF-uh-nees)

014-12-85-16105

BONUS: What American photographer wrote *Making a Photograph* and is known for his photographs of the American West such as *Moonrise, Hernandez, New Mexico*?

ANSWER: Ansel **Adams**

030-12-85-1610-1

6. During this monarch's reign, William Paxton built a Crystal Palace for the Great Exhibition. The last ruler of the House of Hanover, this monarch entered perpetual mourning after the death of Prince Albert of Saxe-Coburg Gotha. She led the United Kingdom during the construction of the Suez Canal, the controversy over the Corn Laws, the Irish Potato famine, and the Crimean War. For 15 points, name this longest reigning British monarch of all time, a queen who died in 1901.

ANSWER: Alexandrina **Victoria**

015-12-85-16106

BONUS: Which group of elements, with atomic numbers 57 through 71, demonstrates a namesake "contraction" as a result of poor shielding by 4f electrons?

ANSWER: **lanthanides** [or **lanthanoids**]

189-12-85-1610-1

7. In one essay, this author considered the inadequacy of the suicide of Kirillov in *The Possessed* and theorized that the title character must be happy in recognizing the absurdity of his existence. That essay compares the life of man to rolling a boulder up a hill for eternity. This author of *The Myth of Sisyphus* also wrote a novel in which the killing of an Arab on the beach leads to the execution of Meursault (mur-SOH). For 15 points, name this French existentialist who wrote *The Stranger*.

ANSWER: Albert **Camus** (al-BAIR kah-MOO)

014-12-85-16107

BONUS: The biggest Bauhaus-style neighborhood in the world is found in the White City of what Israeli metropolis, which is administratively combined with the port of Jaffa?

ANSWER: **Tel Aviv**

019-12-85-1610-1

8. One text about these entities theorizes "condensation" and "displacement" as two of the main mechanisms employed in forming them. That text distinguished between the latent and manifest content of these entities and proposed that they must be viewed in some form as wish-fulfillments. Sigmund Freud launched psychoanalysis with a book titled for the interpretation of these entities. For 15 points, name these psychological phenomena experienced during sleep.

ANSWER: **dreams**

014-12-85-16108

BONUS: In drama, what term denotes lines addressed by a character to the audience and not heard by the other characters?

ANSWER: **aside**

192-12-85-1610-1

9. This object was at the center of a problem that that observed only one-third the electron neutrinos expected. Sporer's law states that certain features of this object form a butterfly pattern when graphed. The Maunder (MAHN-der) minimum occurred on this object. Another problem associated with this object is how its corona is many magnitudes hotter than its surface. Helium was discovered due to unexplained spectral lines in the photosphere of this object. For 15 points, identify this star at the center of our solar system.

ANSWER: the **Sun**

066-12-85-16109

BONUS: This is a 20-second calculation question. What values for x and y satisfy the system of equations $2y+4x+7=3y$ and $9y-5x=7y+17x$.

ANSWER: **x = 1** and **y = 11**

001-12-85-1610-1

10. One example of the escape type of these things is octal 033 and prefixes escape sequences; the backslash is another example often used in programming languages. These things are the smallest possible match for a regular expression. Their control examples include carriage return and line feed. Types of encodings for them include UTF-8 and ASCII. An array of these things constitutes a string in C. For 15 points, name these things declared with the keyword char in C.

ANSWER: **characters**

066-12-85-16110

BONUS: What Greek prophetess was guided by Apollo and lived in a cave, where she breathed gas vapors that guided her answers?

ANSWER: **Pythia** [or the **Oracle at Delphi**]

088-12-85-1610-1

11. A differential in this property for two different phases gives the partition coefficient. A decrease in this quantity, one measure of which is a substance's K sub sp value, for ionic compounds can be explained by the common ion effect. Henry's law relates this quantity for a gas to the partial pressure of the gas. All common metal nitrates have this property, but most hydroxides, oxides, and phosphates do not. Usually measured with respect to water as a solvent, for 15 points, name this degree to which a substance can dissolve in another substance.

ANSWER: **solubility** [accept **miscibility**]

131-12-85-16111

BONUS: In December 2012, what bank agreed to pay just under two billion dollars to the U.S. government to settle accusations of laundering drug money?

ANSWER: **HSBC**

019-12-85-1610-1

12. The Dr. Sun Yat Sen Classical Chinese Garden can be found in this city's Chinatown, whose size gives this city the proportionally-largest Asian population in North America. A seawall surrounds this city's 1000-acre Stanley Park. Greenpeace was founded in this city, which is 78 miles south of the resort Whistler. This site of the 2010 Winter Olympics is located just north of the state of Washington. For 15 points, name this Canadian city, the capital of British Columbia.

ANSWER: **Vancouver**, British Columbia

080-12-85-16112

BONUS: This is a calculation question. How many cubes of side length 2 can fit in a cube with side length 10?

ANSWER: **125**

001-12-85-1610-1

13. A "pastorale ad libitum" closes a "Christmas" composition of this type by Corelli, an example of the "grosso" form popular in baroque music. A Bartok piece mocking a Shostakovich symphony was known as the one "for orchestra." Mozart composed twenty-seven of a subcategory of these works. The Romantic period involved the fleshing out of the three major kinds of these works: the cello, the violin, and the piano. For 15 points, name these types of compositions written for an orchestra and a solo instrument.

ANSWER: **concertos** [or **concerti**; accept **Christmas Concerto**, **concerto grosso**, **violin concerto**, **piano concerto**, and **cello concerto** before their respective mentions]

014-12-85-16113

BONUS: This is a calculation question. What is the length of the diagonal connecting opposite vertices of a cube with edge lengths of 4?

ANSWER: **4 root 3** [or **4 radical 3**]

197-12-85-1610-1

14. The trained memory class of these substances are used in stents to strengthen blood vessels. In one type of these substances, solute particles are found in gaps in the crystal lattice of the solvent. That type, the interstitial one, is contrasted with the substitutional type of this kind of substance. Common examples of these substances include pewter, brass, bronze, and steel. For 15 points, name these substances, metallic solutions of two or more elements.

ANSWER: **alloys**

131-12-85-16114

What figure of English folklore, who has been portrayed by Errol Flynn, Kevin Costner, and Russell Crowe, is known as the "Prince of Thieves"?

ANSWER: **Robin Hood**

192-12-85-1610-1

15. In this novel, Mrs. Phelps breaks down in tears when the protagonist reads a poem. Its other characters include Mildred, who wants to buy a fourth wall for her TV set. After killing Captain Beatty, the protagonist of this novel is forced to flee from the Mechanical Hound. That protagonist is Guy Montag, who is tasked with memorizing the Book of Ecclesiastes after leaving his job as a fireman. For 15 points, name this Ray Bradbury novel titled for the temperature at which books burn.

ANSWER: **Fahrenheit 451**

015-12-85-16115

BONUS: What mathematician's tomb supposedly bore an inscription of a cylinder and a sphere, two shapes whose relationship he investigated?

ANSWER: **Archimedes**

195-12-85-1610-1

16. This opera includes a love duet beginning, "Wie sie fassen, wie sie lassen," and this opera opens with a notable dissonant chord consisting of F, B, D-sharp and G-sharp. This opera ends with a famous *Liebtestod* sung by the female lead. In this opera, Brangäne explains to Marke, the king of Cornwall, how a love potion caused the affair between the title characters, one of whom is an Irish princess betrothed to Marke. For 15 points, name this opera by Richard Wagner.

ANSWER: **Tristan and Isolde** [or **Tristan und Isolde**]

014-12-85-16116

BONUS: What painting, subtitled "The Great Western Railway," is a depiction of a small rabbit running away from a train by J.M.W. Turner?

ANSWER: **Rain, Steam, and Speed-The Great Western Railway**

192-12-85-1610-1

17. In January 2012, this company's assets were frozen in Hong Kong, where it was legally incorporated. At the time, this company's holdings accounted for one percent of all Internet traffic. The U.S. Department of Justice website was taken down by Anonymous following the shutdown of this company's sites and a raid by New Zealand police on founder Kim Dotcom. For 15 points, name this defunct file host, now the target of a copyright-infringement case.

ANSWER: **Megaupload** Limited [or **megaupload.com**]

019-12-85-16117

BONUS: What author of "The Origin of Continents and Oceans" is best known for formulating the theory of continental drift?

ANSWER: Alfred Lothar **Wegener**

192-12-85-1610-1

18. As Secretary of State, this man negotiated an 1842 treaty with Britain named for him and Baron Ashburton. He concluded his "Second Reply to Hayne" with the phrase "Liberty and Union, now and forever, one and inseparable!" This man formed the so-called "Great Triumvirate" with John C. Calhoun and Henry Clay. This Whig was vilified by the anti-slavery faction for throwing his support behind the Compromise of 1850. For 15 points, name this great Massachusetts orator.

ANSWER: Daniel **Webster**

015-12-85-16118

BONUS: Name the Canadian province that is home to the scenic Banff National Park, as well as the major cities of Calgary and Edmonton.

ANSWER: **Alberta**

019-12-85-1610-1

19. The protagonist of this novel has a dream in which he borrows money from his father. Another of its characters performs a personal ritual before deciding to kill Carla Jean. Carla Jean is the wife of Llewelyn Moss, a welder whose theft of millions of dollars from a drug deal sparks the action of this novel. This novel's protagonist is the Sheriff Ed Tom Bell, who retires when he is unable to find Anton Chigurh, who kills his victims with a cattle gun. For 15 points, name this novel by Cormac McCarthy.

ANSWER: **No Country for Old Men**

015-12-85-16119

BONUS: What language is the sixth most spoken in the world, with three hundred million native speakers, but only the third most common in India, after Hindi and English?

ANSWER: **Bengali**

019-12-85-1610-1

20. One leader of this movement was David Walker, who was found dead in Boston after publishing his *Appeal*. A mob in Alton, Illinois, destroyed a printing press and killed Elijah Lovejoy for supporting this cause. Another of its leaders was William Lloyd Garrison, who published a newspaper called *The Liberator*. For 15 points, name this nineteenth century social movement whose supporters, such as Frederick Douglass, advocated the immediate end to slavery.

ANSWER: **abolition** of slavery [or **abolitionism**; or **anti-slavery** movement]

015-12-85-16120

BONUS: This is a 30-second calculation question. Two dice are each weighted such that a 6 will come up 50% of the time and the other five numbers will come up 10% of the time each. What is the probability that a roll of these two dice will sum to at least 11?

ANSWER: **0.35** [or **35%**; or **7/20**]

003-12-85-1610-1

21. This poet described skin "bright as a Nazi lampshade" in a poem which begins "I have done it again. One year in every ten I manage it." Another of this author's poems begins, "You do not do, you do not do any more, black shoe." The wife of Ted Hughes, this poet of "Lady Lazarus" wrote about Esther Greenwood's estrangement with Buddy Willard and treatment with shock therapy in her novel *The Bell Jar*. For 15 points, name this suicidal American poet of "Daddy."

ANSWER: Sylvia **Plath**

015-12-85-16121

BONUS: Which American school of philosophy, which lends its name to a book by William James, sought to consider the practical value of hypotheses?

ANSWER: **Pragmatism** [or word forms]

189-12-85-1610-1

22. This country is the birthplace of a kind of seafood dish marinated in lime, ceviche. Huge drawings of hummingbirds, monkeys, and spiders that can be seen from the sky were created in this country by the Nazca culture. A zigzagging bus ride from Aguas Calientes allows tourists to reach a lost city in this country that was rediscovered by Hiram Bingham. It shares control of the world's highest navigable lake, Lake Titicaca, with its eastern neighbor Bolivia. For 15 points, name this Andean country that contains Machu Picchu and other Incan ruins.

ANSWER: **Peru**

080-12-85-16122

BONUS: This is a 30-second calculation question. What is the area of a regular octagon with side length 2?

ANSWER: **8 plus 8** times the square **root** of **2** [or **8 plus 8 radical 2**; or **8 times** the quantity **one plus** the square **root** of **2** close quantity; or mathematical equivalents]

003-12-85-1610-1

23. This organ is responsible for absorbing vitamin B12 because of its production of intrinsic factor with parietal cells. The mucosal lining of this organ can become the residence of *H. pylori*, which causes ulcers. This organ is connected to the duodenum by the pyloric sphincter. For 15 points, identify this digestive organ that uses enzymes and strong acids to break down food, and which is located between the esophagus and small intestine in humans.

ANSWER: **stomach**

066-12-85-16123

BONUS: Identify the photo-sharing service which was purchased by Facebook for one billion dollars in April 2012 and caused controversy in December with a terms-of-service change allowing it to sell users' photos.

ANSWER: **Instagram**

019-12-85-1610-1

24. One poem by this author tells of an Assyrian army that "came down like the wolf on the fold." In addition to "The Destruction of Sennacherib," this author wrote an epic poem in which the title character pursues a romance with Haidee after fleeing Spain. A poem by this author notes how "all that's best of dark and bright meet in her aspect and her eyes," describing a woman who is "like the night of cloudless climes and starry skies." For 15 points, name this British Romantic poet of *Don Juan* who died in Greece.

ANSWER: George Gordon, Lord **Byron**

194-12-85-16124

BONUS: Prokofiev's first symphony pays homage to what era of music, situated between the Baroque and Romantic eras?

ANSWER: **Classical** era

020-12-85-1610-1

25. Erysichthon (ER-ee-SICH-thon) was punished with unending hunger for destroying a grove sacred to this goddess. Members of the Eleusinian Mysteries worshiped her. She taught Triptolemus agriculture while searching earth for her daughter. That daughter ate four pomegranate seeds that forced her to spend four months of the year in the underworld. For 15 points, name this Greek goddess of agriculture whose daughter Persephone was abducted by Hades.

ANSWER: **Demeter** [or **Ceres**]

121-12-85-16125

BONUS: If an object is "galazio" in Greek, "laahm" in Cantonese, and "azul" (ah-ZOOL) in Spanish, what is it in English?

ANSWER: **blue**

019-12-85-1610-1



26. The "D-" and "L-" configurations of these molecules are distinguished in the Fischer Projection. The absence of these compounds can force the body into ketosis and accelerate the breakdown of proteins into amino acids for use in gluconeogenesis. More complex examples of these compounds are built up from several of them linked by glycosidic bonds. These compounds include chitin and starches. For 15 points, name these molecules including glucose and other sugars that are made up of hydrogen, oxygen, and carbon.

ANSWER: **Carbohydrates** [or **sugars** before it is read; or **saccharides** before it is read; or poly **saccharides**; or **disaccharides**; or monos**saccharides**]

080-12-85-16126

BONUS: What term applies to ten or twenty times the base-10 log of the ratio of two power quantities and is a common quantifier of the "loudness" of a sound?

ANSWER: **decibels**

023-12-85-1610-1

27. A failed attempt to influence this issue through the courts resulted in the 2006 *Wilkinson v. Kitzinger* case. Michael Gove and Boris Johnson are among those who have endorsed this status, though Rowan Williams has spoken out against it. At the 2011 Conservative Party conference, David Cameron announced that he supports this change not "despite" but "because" of his conservatism. For 15 points, a free vote by 2015 may implement what change to marriage laws in the United Kingdom?

ANSWER: **same-sex** marriage in the United Kingdom [or **gay** marriage or other obvious equivalents; or "England" or "Wales" or the "UK" in the place of "United Kingdom" if given]

019-12-85-16127