

1. Léon Gambetta attempted to organize one side's defenses in this war, but fled in a hot air balloon. The Treaty of Frankfurt ended this war, in which the Battle of Sedan was fought. One cause of this war was the possibility of Leopold of Hohenzollern gaining the Spanish throne. Another cause of this war was an edited letter between the ambassador of one country in this war and Wilhelm I. That document known as the Ems Dispatch was used to advance the goals of Otto von Bismarck. For 10 points, name this 1870-1871 war between two European nations that led to German unification. ANSWER: **Franco-Prussian** War [or **Franco-German** War]

ANSWER. <u>Franco-Frussian</u> war [or <u>Franco-German</u> war]

2. *Sejanus His Fall* is one of two surviving tragedies by this author. John Littlewit and his wife Win-the-Fight Littlewit attend the title event of one of this author's plays. In another play, Mosca is the servant of the deceitful title character. The line "Drink to me only with thine eyes" is found in his poem "To Celia." This author of *Bartholomew Fair* wrote a play in which Face and Subtle con people out of their money. For 10 points, name this British author of the plays *Volpone* and *The Alchemist*. ANSWER: Ben Jonson

3. In mechanics, Varignon's theorem deals with this quantity. When a system of forces has a nonzero value for this quantity but no resulting force, it is called a "couple." This quantity can be measured in units of newton metres or joules per radian. It can be defined as the cross product of displacement and force, or the time derivative of angular momentum. It is also known as "moment." For 10 points, name this measure of how much a force acting on an object causes it to rotate.

ANSWER: torque [or moment before it is read]

4. While treasurer of the Ohio Company, this man wrote *Extracts from the Virginia Charters, with Some Remarks upon Them.* This man was the representative of Fairfax county at the Virginia Convention. One of his stated views against the constitution was that "the augmentation of slaves weakens the states." Along with Thomas Jefferson, this man was one of the key drafters of the 1776 Virginia Constitution. This man wrote the Virginia Declaration of Rights. For 10 points, name this Founding Father and namesake of a large university in northern Virginia.

ANSWER: George Mason

001-10-24-02104

5. In one work by this playwright, a traveling sculptor reminds a woman of her broken engagement to a sailor. In a later play by this author, the daughter of that heartbroken woman persuades a man to put a wreath on top of a house. This creator of Hilda Wangel also wrote about a woman who financed a trip to Italy by forgery, leading to blackmail by Krogstad. For 10 points, name this author of *The Lady From the Sea, The Master Builder*, and a play in which Nora Helmer slams the door on middle-class Norwegian values, *A Doll's House*.

ANSWER: Henrik Johan Ibsen

019-10-24-02105

001-10-24-02101

001-10-24-02102

6. The scenario for this musical work was first conceived by Nicholas Roerich (ROAR-ik), who also designed its costumes and sets. Excerpts from it accompanied an animation of the prehistoric earth and dinosaurs in Walt Disney's *Fantasia*. Subtitled "Pictures from Pagan Russia," this Sergei Diaghilev (dee-AH-gil-ev) production begins with a high bassoon solo. Its choreography by Vaslav Nijinsky ends with a young girl dancing herself to death in a sacrificial ritual. For 10 points, name this ballet which caused a riot at its 1913 Parisian premiere and was written by Igor Stravinsky.

ANSWER: The <u>Rite Of Spring</u> [or Le <u>Sacre du printemps</u>; or <u>Vesna svyashchennaya</u>]

082-10-24-02106

7. One goddess of this culture was killed by four hundred of her children after she was impregnated by a ball of feathers, after which these people's war god sprung fully armed from the womb. Another god of these people was represented by a smoky obsidian mirror. Mictlan is the underworld of this culture. Legend holds that this culture's ruler mistook Hernan Cortes for their feathered-serpent god. For 10 points, name this Mesoamerican civilization that worshiped the god Quetzalcoatl (KETZ-ul-co-AH-tul). ANSWER: the <u>Aztec</u>s

026-10-24-02107

8. This principle was independently developed by William Castle. One phenomenon which would cause this principle not to apply is avoided by self-incompatibility in plants; that phenomenon, which favors homozygosity, is assortative mating. Deviation from it can be caused by meiotic drive, non-random mating, genetic drift, or mutations. For 10 points, name this principle which states that allele and genotype frequencies remain constant in the absence of disturbing influences. ANSWER: Hardy-Weinberg equilibrium

024-10-24-02108

9. One clan that sacrificed to this deity intermingled human entrails with that of the animal's at Mouth Lykaion (LIKE-ey-on). This deity was granted one attribute out of gratitude for release from imprisonment by the Cyclopes. Guises assumed by this deity include a shower of gold and a swan. Children of this deity include Helen of Troy, along with Castor and Pollux. This god forced his father, Cronus, to vomit up this deity's siblings, which included Demeter, Hades, Poseidon, and his wife, Hera. For 10 points, name this thunder god and head of the Greek pantheon. ANSWER: Zeus

081-10-24-02109

10. Its support for William McAdoo caused the deadlock that ended with John Davis's nomination for President. The original organization by this name was romanticized by Theodore Dixon and led by Nathan Bedford Forrest. Its revival began at a 1915 meeting at Stone Mountain after the release of *The Birth of a Nation*. For 10 points, name this organization known for its hate crimes against blacks, whose meetings featured burning crosses and white robes and hoods.

ANSWER: Ku Klux Klan [or KKK]

11. Leopardi wrote one of these poems about Italy including the line "alone I will fight" and one to Angelo Mai. Andrew Marvell wrote one of these about "Cromwell's return from Ireland." A notable one of these contains the lines "Even while we speak, envious time has passed: seize the day." The components of a classic one of these are the strophe, antistrophe, and epode. Noted authors of these are Pindar and Horace. For 10 points, name this poetic genre which was used by Keats in a poem about a Grecian urn. ANSWER: <u>ode</u>

001-10-24-02111

12. The Treaty of Fort Stanwix involved acquisition of land south of this river. In the late 1700's, this river was the southern boundary of the Northwest Territory. The mouth of this river is located in Cairo, Illinois and this river flows through such cities as Wheeling and Evansville. The Wabash is one of the largest tributaries of this river. In the heart of Pittsburgh, this river is formed by the joining of the Monongahela and Allegheny rivers. For 10 points, name this river which as its name suggests forms the southern border of a state with capital at Columbus.

ANSWER: **Ohio** River

13. This rapper claims that his "picture should be in the dictionary next to the definition of definition," and on the same track, he disses Al Sharpton. That track, "Shoot Me Down," appeared on the same album as another song that repeats the lines "We are not the same, I am a Martian" and "Phone Home." He sampled the theme song from *The Office* on one song from his *No Ceilings* mixtape. He picked up a guitar for the track "Prom Queen" on the album *Rebirth*. For 10 points, name this rapper behind popular hits like "A Milli" and "Lollipop."

ANSWER: Lil Wayne [or Dwayne Michael Carter, Jr.]

14. This man wrote a play whose title is a double entendre which can refer to Lord Darlington. His scathing letter to Alfred Douglas was later edited and published as *De Profundis*; that work, like a poem that claims that "each man kills the thing he loves," was written while in Reading Gaol (JAIL). One of this man's works was satirized in the skit, "The Advisability of Not Being Brought Up in a Handbag." For 10 points, name this author of *Lady Windermere's Fan* and *The Importance of Being Earnest*. ANSWER: Oscar Fingal O'Flaherty Wills <u>Wilde</u>

003-10-24-02114

15. The Oddi Chapel contains this man's rendition of the *Coronation of the Virgin*. This artist depicted a kneeling Saint Jerome and Mary Magdalene before the cross in his *Mond Crucifixion*. Another of his works shows John the Baptist and Jesus Christ as infants holding a bird. This artist of the *Madonna of the Goldfinch* painted his *La Disputa* in the Stanza della segnatura (seg-nah-TOR-uh), a room which also contains a work in which Plato and Aristotle are surrounded by other ancient Greek scholars. For 10 points, name this artist of *The School of Athens*.

ANSWER: Raphael Sanzio [or Raphael Sanzio]

001-10-24-02115

064-10-24-02112



1A. "Binary search" and "Red-black" are two types of which structure from computer science that consists of a series of connected nodes, some of which are labeled as parent nodes and leaf nodes? ANSWER: <u>trees</u>

1B. What term refers to the five convex polyhedra whose faces are congruent regular polygons, including the cube and the octahedron?

ANSWER: **Platonic solid**s

2A. Name the independent mayor of New York City who has supported the building of Park51, a Muslim community center located near the former site of the World Trade Center.

ANSWER: Michael Rubens Bloomberg

2B. Name the American author who created the characters Rhett Butler and Scarlett O'Hara in her novel *Gone With the Wind*.

ANSWER: Margaret Munnerlyn Mitchell

3A. This is a 10-second calculation question. Expand quantity x + 8 end quantity squared. ANSWER: $\underline{x^2 + 16 x + 64}$

3B. This is a 10-second calculation question. What is the surface area of a cube with sides of length 10 units?

ANSWER: 600 square units

4A. What group of Dutch immigrants to South Africa founded the Orange Free State and Transvaal before fighting a pair of namesake wars with the British?

ANSWER: Boers

4B. What law of physics states that force is equal to the negative spring constant multiplied by displacement?

ANSWER: Hooke's Law

5A. This is a 20-second calculation question. What is the probability of picking a non-face card from a set of three standard decks of cards?

ANSWER: <u>10/13</u>

5B. This is a 20-second calculation question. A Mersenne number is a number of the form 2^x - 1, where x is an integer greater than 0. What is the median of the first 8 Mersenne numbers? ANSWER: <u>23</u>

6A. What physicist introduced a model of the atom that replaced the "plum-pudding" model and consisted of electrons moving in fixed orbits around a nucleus? ANSWER: Niels **Bohr**

6B. This is a 30-second calculation question. If a perfect number is equal to the sum of its divisors, including one and itself, divided by two, what is the sum of the first two perfect numbers? The number one is not a perfect number.

ANSWER: <u>34</u>

7A. This is a 30-second calculation question. What is the length of the hypotenuse of a triangle whose shortest leg is length 7 and whose longest leg is one less than the length of the hypotenuse? ANSWER: <u>25</u>

7B. Name this architect who designed the White City for Chicago's 1893 Columbian Exposition, and imagined a waterfront park in his 1909 Plan of Chicago. ANSWER: Daniel **Burnham**

8A. What is the name of a fracture in the crust of the Earth, one of which is found in San Andreas? ANSWER: <u>fault</u>s

8B. Two characters in *The Legend of Bagger Vance* and a Jim Caviezel-played protagonist in the biographical film *Stroke of Genius* were inspired by what golfer, who retired at age 28 as the greatest amateur golfer of all time, then founded the Masters tournament? ANSWER: Robert Tyre "Bobby" **Jones**, Jr.

9A. Indifference curves are constructed from bundles of goods that deliver the same amount of which property that, for most consumers, diminishes with each additional unit of the good they consume? ANSWER: <u>utility</u>

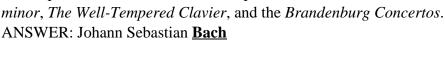
9B. What compound has chemical formula H6C6 and a ring-like structure, which was first identified by August Kekule during the nineteenth century?

ANSWER: benzene

10A. Name the object that has nodes and amplitude, and which are sometimes sinusoidal or standing. ANSWER: **wave**s

10B. In the study of Spanish, the perfective past tense, as contrasted to the imperfect past tense, is usually known by which term?

ANSWER: preterite



2. This man wrote play in which Heracles brings Admetus's wife back from the dead. In another play by him, Talthybius (tahl-THIH-bee-us) foretells the death of Astyanax (uh-STY-uh-naks), the granddaughter of Hecuba. This author of *Alcestis* and *The Trojan Women* wrote a play that ends with the title character escaping in the sun god's chariot after using a poisoned cloak to kill her husband's lover Glauce (GLOU-see). For 10 points, name this Greek playwright who wrote about Jason's wife in *Medea*. ANSWER: **Euripides**

1. This composer was given the task of improvising on a "Royal Theme" provided to him by a monarch,

composer contains a solo for virtuoso harpsichord. That work was written for the margrave of a certain city. For 10 points, name this German composer whose works include the organ piece *Toccata and Fugue in D*

which eventually resulted in his piece The Musical Offering. The fifth part of another work by this

3. Early theories of this object's formation include the fission theory and the co-accretion theory, while the current accepted theory is occasionally referred to as the "Big Splash" and involves collision with a Mars-sized object. This object contains ray craters such as those named Tycho and Copernicus, and its major features are classified as either terrae or maria. For 10 points, name this only extraterrestrial object visited by humans, the only satellite of the third planet from the sun. ANSWER: the Earth's **moon** [or **Luna**]

4. The *Kebra Nagast* maintains that this Biblical figure was the male progenitor of the line that would eventually culminate in the reign of Haile Selassie. One of this figure's books contains the line "Please, catch for us the foxes in the vineyard... the little foxes." According to scripture, the seven hundred wives of this figure "turned his heart after other gods," except for Naamah. This figure was the last ruler of a united Israel, wrote *Ecclesiastes* and *Song of Songs*, and was visited by the Queen of Sheba. For 10 points, identify this wise ruler of Israel, the son of David. ANSWER: **Solomon** [or **Schlomo**; or **Jedidah**]

020-10-24-02120

5. A July 2007 speech by this man in Senegal offended Africans by referencing "African peasants." This man gained national attention in the early '90s for attempting to negotiate the release of children taken hostage by a man called the Human Bomb. More recently, this man's government was the subject of a scandal in which politicians were alleged to have received cash-stuffed envelopes at the mansion of Liliane Bettencourt. This politician also made the news after his wedding to singer-model Carla Bruni. For 10 points, name this current president of France. ANSWER: Nicolas **Sarkozy**

081-10-24-02121

VHSL Regionals 2010-2011 Round 2 Third Period, Fifteen Tossups

023-10-24-02117

079-10-24-02118

6. An important source of these elements is monazite. Common methods of processing them include oxalate precipitation and ion exchange processes. One of these dopes YAG in an important laser design, and that same element is found with iron and boron in a powerful permanent magnet. Today most of these elements are mined in China. This group includes scandium and yttrium, as well as the lanthanides. For 10 points, name this group of elements that despite their name are actually quite abundant in the Earth. ANSWER: **rate earth** metal [or **rare earth** elements; or **lanthanide**s before scandium]

001-10-24-02122

7. This country experienced an interregnum during a crisis that took place between 1383 and 1385. As a result, the Aviz (ah-VEEZ) Dynasty was installed as its ruling house, and that dynasty later gave rise to the Braganza (bruh-GON-zuh) Dynasty. The Carnation Revolution brought democracy to this country, overthrowing the Estado Novo of António Salazar. This country was home to Henry the Navigator, who supported its explorers, and later explorers from this country include Vasco da Gama. For 10 points, name this country which colonized Brazil.

ANSWER: Portugal [or Portuguese Republic; or Republica Portuguesa]

024-10-24-02123

8. This author's most famous work features a socialist philosopher named Nicholas Schliemann. This author wrote the novel *The Presidential Agent*, which, like his earlier novel *Dragon's Teeth*, features the character Lanny Budd. His novel *Oil!* formed the basis for the film *There Will Be Blood*. He is best known for a novel about Jurgis Rudkus which was an indictment of the Chicago meat packing industry. For 10 points, name this author of *The Jungle*. ANSWER: Upton **Sinclair**

024-10-24-02124

9. One person thought to have been involved in this event was Rudolph Schnaubelt. Louis Lingg committed suicide in the aftermath of this event. John Altgeld pardoned three people who were implicated in this event, including Samuel Fielden and Michael Schwab, but four men were hanged, including August Spies. This event occurred during a rally for striking workers when a bomb was thrown at the police by an unknown person. For 10 points, name this 1886 riot which took place in Chicago. ANSWER: **Haymarket** Square Riot

024-10-24-02125

10. One show currently airing on this channel is a cartoon about the Hellman family, who are demons living in Houston. In 2010, this channel ordered an additional ninety episodes of a sitcom that had only been on the air for six months; that show regularly guest-stars Ice Cube and is based on the film *Are We There Yet?* This cable channel also airs the 1980s fraternity comedy *Glory Daze* and two Tyler Perry sitcoms, *House of Payne* and *Meet the Browns*. For 10 points, name this current home of late-night hosts George Lopez and Conan O'Brien, which was once an Atlanta TV station owned by Ted Turner. ANSWER: **TBS**

019-10-24-02126

11. One character in this play recalls an argument he had with Mose Porter about the difference between Anarchists and Socialists. Another character, nicknamed the "old Foolosopher," notes that the play's setting is the "Bedrock Bar, The End of the Line Cafe...the last harbor." Joe Mott and Larry Slade are among those gathered for drinks at Harry Hope's saloon, waiting for Theodore Hickman, nicknamed "Hickey," to show up. For 10 points, name this Eugene O'Neill play about disillusioned drunks holding on to their "pipe dreams."

ANSWER: The Iceman Cometh

12. During this event, Edmund Heines was found in bed with an eighteen-year-old. One of the architects of this event was Viktor Lutze, who became the successor of the primary target of this event. Another victim of this event was Kurt von Schleicher, the last Chancellor of the Weimar Republic. Its aim was to eliminate supporters of Franz von Papen and other critics of the Nazi regime. For 10 points, name this purge which targeted Ernst Röhm and the SA and was led by Adolf Hitler.

ANSWER: **<u>Night of the Long Knives</u>** [or Operation <u>Hummingbird</u>]

024-10-24-02128

003-10-24-02129

079-10-24-02130

13. These organelles are described in terms of Svedberg units, which are computed through sedimentation. They contain A and P sites, which are the sites of aminoacyl (uh-MEE-no-AY-sill) and peptidyl (PEP-tid-ill) binding. They contain both a namesake kind of RNA and tRNA. They are manufactured in the nucleolus and can be found attached to the rough endoplasmic reticulum. For 10 points, name these sites of protein synthesis.

ANSWER: **ribosome**s

14. The speaker of this poem says that Ruth "stood in tears amid the alien corn." The speaker says, "A drowsy numbness pains my sense as though of hemlock I had drunk" and admits that he "has been half in love with easeful death." The speaker of this poem says that the addressee "wast not born for death" before wondering of the addressee, "Was it a vision or a waking dream…do I wake or do I sleep?" For 10 points, name this ode to an "immortal Bird" by John Keats.

ANSWER: "Ode to a Nightingale"

15. In this market structure, the average revenue curve is equal to the demand curve, and thus the only way to increase revenue is to lower price. When the barriers to entry which create this structure manifest as extremely high infrastructure cost, this structure is said to be "natural;" examples include water utilities and telecommunications. For 10 points, identify this microeconomic market structure in which a good has only one seller.

ANSWER: monopoly



VHSL Regionals 2010-2011 Round 2 Tiebreaker Questions

1. This city lies south of Thane and was originally built on an archipelago that include Old Woman's Island. The Elephanta Caves are near this city, which was the site of two terrorist attacks by Lashkar-e-Taiba. This city is the capital of the Maharashtra state and contains a gateway that was built to commemorate a visit by King George V and Queen Mary. In 2008 this city was the site of a large scale terrorist attack orchestrated by Pakistani nationals which include a standoff at the Taj Mahal Hotel. For 10 points, name this home of Bollywood, the largest city in India formerly known as Bombay. ANSWER: <u>Mumbai</u> [or <u>Bombay</u> before it is read]

064-10-24-02132

003-10-24-02133

024-10-24-02134

2. The triangular fibrocartilage (FYE-bro-KAR-til-age) complex provides cushion at one end of this joint. The eight bones located at this joint include the trapezoid, trapezium, and scaphoid (SCAFF-oyd). Ligaments at this joint include the ulnar and radial collateral ligaments, and the median nerve that goes through it can become compressed through repetitive motions such as typing in carpal tunnel syndrome. For 10 points, name this joint that connects the arm to the hand. ANSWER: wrist

3. In one of his plays, Harry and Edna are frightened into leaving home and stay at Agnes and Tobias' house. He also wrote a play in which Jerry kills himself with a knife held by Peter. This author of *A Delicate Balance* and *The Zoo Story* also wrote a play in which the "mousy" Honey and her husband Nick visit the house of the bickering couple George and Martha. For 10 points, name this dramatist of *Who's Afraid of Virginia Woolf?*

ANSWER: Edward Franklin Albee III

4. When this man visited Argentina, Severino Di Giovanni planned to bomb the train he was on. His namesake "moratorium" called for a one-year cessation of reparation payments by Germany. This man signed the act outlawing yellow dog contracts named for Norris and La Guardia. This man had Douglas MacArthur break up the Walter W. Waters-led Bonus Army. For 10 points, name this President whose time in office was marred by his poor response to Black Tuesday, which occurred at the start of the Great Depression.

ANSWER: Herbert Clark Hoover

024-10-24-02135

5. This device was famously used in a phrase written by William Safire for Spiro Agnew, and it is also used in the titles of Jeff Lindsay's novels about Dexter Morgan. This device is the basis of Old English poetry. It is used in the titles of John Updike's "Rabbit" novels. It is distinguished from assonance and consonance. For 10 points, name this device in which sounds are repeated at the beginning of several words, as in "Mickey Mouse."

ANSWER: alliteration

024-10-24-02136

Identify the British author who recalled his World War I experiences in *Good-Bye to All That*, theorized about primitive mythology in *The White Goddess*, and depicted Roman court politics in his *I*, *Claudius* series.

ANSWER: Robert Graves

This is a calculation question. What is the positive root of $x^2 + 10 x - 18$? ANSWER: square <u>root</u> of <u>43 minus 5</u> [or <u>-5 +</u> square <u>root</u> of <u>43</u>]