

(MS) Academic Bee Semifinal

Regulation Tossups

(1) **This man and his brother created the YouTube channels *Vlogbrothers* and *Crash Course* and have fans called "nerdfighters."** In one novel by this man, **Miles Halter, (+)** also known as "Pudge," narrates the story of his lost love, the title character. In another work by this man, the narrator survives thyroid cancer, but her **boyfriend (*)** succumbs. For the points, who is this author of *Looking for Alaska* and *The Fault in our Stars*?

ANSWER: John **Green**

(2) **John Coltrane played with this musician's quartet at the "Thanksgiving Jazz" charity concert. With drummer Kenny Clarke, this musician composed "Epistrophy" [[ee-PIZ-truh-pee]]. This musician notably used angular (+) melodic twists and dissonance on albums such as the *Genius of Modern Music* and *Brilliant Corners*. A noted jazz pianist, (*)** for the points, who was this man who wrote "Straight, No Chaser" and "Round Midnight"?

ANSWER: Thelonious **Monk** (or Thelonious Sphere **Monk**)

(3) **The partial version of this operation is used to calculate a Jacobian [[jah-KOH-bee-an]] matrix. L'Hôpital's [[loh-pee-TAHL]] Rule involves applying this operation to the numerator and denominator when taking the limit (+) of certain functions. This operation is invalid at the origin for the absolute value function since the limit does not exist as "h" approaches zero. Returning the slope (*) of a function at a given point, for the points, what is this operation?**

ANSWER: **Differentiation** (accept **Derivative**)

(4) **A mountain named for this explorer is the highest in the Rwenzori Range and has its apex at Margherita Peak. The port of Kisangani was formerly named for this explorer as the furthest navigable port of the Congo (+) River, and this explorer names a series of rapids on that river that he worked as an agent of Leopold II in the Congo Free State. A Welsh explorer, (*)** for the points, who was this man who pursued David Livingstone?

ANSWER: Henry Morton **Stanley** (or John **Rowlands**; accept Mount **Stanley**; accept **Stanley Falls**)

(5) **This painting appears behind three women in Grant Wood's *Daughters of Revolution*. This painting that appears on the back of New Jersey's state quarter depicts Nathanael Greene (+) and others pushing past floating blocks of ice. Depicting a cadre of men on their way to the Battle of Trenton, (*)** for the points, what is this Emmanuel Leutze [[LOY-tshuh]] painting that includes the first president of the United States?

ANSWER: *Washington Crossing the Delaware*

(6) **In this play, a woman remarks how her son came into manhood "like a rainbow after the rain." A woman in this play rejects George Murchison in favor of a man who chastises her for straightening her hair. In this play, the Younger (+) family rejects a buyout offer to block them from moving into an all-white neighborhood. Taking its title from a Langston Hughes poem which asks, (*) "What happens to a dream deferred?"** for the points, what is this Lorraine Hansberry play?

ANSWER: A *Raisin in the Sun*

(7) **Norman Tebbit supported a group of "Rebels" who refused to ratify this treaty, almost leading to the collapse of John Major's government. Along with the Treaty of Rome, this treaty was amended by the 2007 Treaty of Lisbon. (+) This treaty's "criteria" include keeping debt at 60 percent of the country's GPA or lower and setting up requirements for a new transnational currency. Named for a Dutch (*) city,** for the points, what is this 1992 treaty that created the European Union?

ANSWER: Treaty of Maastricht (accept Treaty on European Union before "Dutch" is mentioned; accept Maastricht Rebels; accept Maastricht criteria)

(8) **This organelle utilizes glycosylation [[gly-KAH-sih-lay-shun]] enzymes to attach sugar monomers [[MAH-noh-mers]]. This organelle's components are divided into cis, medial, and trans compartments. Like the endoplasmic (+) reticulum, this organelle is made of flattened membrane-enclosed discs called cisternae [[sih-STER-nay]]. Packaging proteins into membrane-bound (*) vesicles,** for the points, what is this apparatus named for an Italian scientist?

ANSWER: Golgi Bodies (or Golgi Apparatus)

(9) **One entry from this volume says that "if God choose" the speaker will perform "better after death." That phrase from this book follows lines that compare the title action to "freely, as men strive for Right" and "with the passion (+) put to use in my old griefs." "Yes, Call me By My Pet-Name" and "How do I love thee? Let me count (*) the ways" are found in,** for the points, what book of poems by Elizabeth Barret Browning?

ANSWER: *Sonnets from the Portuguese*

(10) **During a voyage, one of this vessel's passengers read the *Principles of Geology* and collected fossils. While under Captain Robert FitzRoy, a passenger on this vessel conceived of common descent and natural selection. (+) *The Voyage of* [this ship] titles a travel memoir written by the author of *On the Origin of Species*. (*)** For the points, name this ship on which Charles Darwin rode to visit the Galapagos.

ANSWER: HMS **Beagle**

(11) **This city is just northwest of Lake Alexandrina. This city is located north of the Fleurieu [[FLOO-ree-oh]] Peninsula and lies in the foothills of the Mount Lofty ranges. This city was the planned capital for a freely-settled (+) British province in Australia and was named for King William IV's consort. Located northeast of Kangaroo Island, (*)** for the points, what is this largest city in South Australia?

ANSWER: **Adelaide**

(12) **The invertebrate creatures within this phylum, such as gorgonians and hydroids, are aquatic in nature and found in both fresh and saltwater. This phylum is classified into four main groups, including the sessile Anthozoa (+) and the swimming Scyphozoa. Taking its name from its harpoon-like "nettle cells," (*)** for the points, what is this phylum which contains the infamous box jellyfish?

ANSWER: **Cnidaria** (accept **Cnidarians**)

(13) **In a Hans Christian Andersen story, this bird's song entrances everyone, including the emperor, but it is eventually banished and replaced with a mechanical version. Juliet (+) claims to hear this bird's song but is told by Romeo, "It was the lark, the herald of the morn." This nocturnal bird is paired with a red rose in a short story by Oscar Wilde. Addressed by the narrator, pondering if he was dreaming, (*)** for the points, what is this title bird from a John Keats ode?

ANSWER: **Nightingale** (accept "The **Nightingale**"; accept "The **Nightingale** and the Rose"; accept "Ode to a **Nightingale**")

(14) **One poet from this dynasty commemorated Yang Guifei [[YAHNG GWEE-FAY]] with the poem "Song of Everlasting Regret." This dynasty was interrupted by the Second Zhou [[ZHOU]] Dynasty led by Empress Wu. (+) This dynasty's hegemony [[heh-JEH-mah-nee]] in Central Asia ended at the Battle of Talas River with victory for the Abbasids [[AH-bah-sids]]. Declining after the An Lushan [[AHN LOO-SHAHN]] (*)** Rebellion, for the points, what is this Chinese dynasty which succeeded the Sui [[SWEE]]?

ANSWER: **Tang** [[TAHNG]] Dynasty (accept **Tang** Empire; accept **Táng**cháo)

(15) **Theodore von Kármán was this institution's first director during a time in which it was contracted by the US Army. Dana Ulery worked for this organization and collaborated on projects named Ranger and Mariner. (+)** This organization was founded as the Aerojet Corporation, and today it is owned by NASA and managed by Caltech. A research and development center located in Pasadena, (*) for the points, what is this organization that specializes in robotics and spacecraft?

ANSWER: **Jet Propulsion Laboratory** (accept **JPL**)

(16) **This man weds Mary Morstan, a woman who first appears in *The Sign of the Four*. This character's last appearance was in "The Adventure of Shoscombe Old Place in 1927. This character meets their famous (+)** companion while looking for a roommate after returning from Afghanistan, eventually coming to live at 221B (*) Baker Street. For the points, name this doctor and faithful sidekick to Sherlock Holmes.

ANSWER: Dr. John H(amish) **Watson**

(17) **The first attempt at developing this system was carried out by the HaFraBa organization, parts of which were opened by then mayor of Cologne, Konrad Adenauer. A circle with three black lines on this system indicates that "limits no longer (+)** apply," and this system connects states such as Thuringia and Baden-Württemberg. Largely developed to stimulate the economy by the (*) Nazi regime, for the points, what German highway system is known for its lack of speed limits?

ANSWER: **Autobahnen** (accept Bundes**autobahn**; accept **BAB**; prompt on generic descriptions of a federal German highway system)

(18) **A parody of this work is titled *Boulevard of Broken Dreams* and features James Dean, Elvis Presley, and Marilyn Monroe. A door at the back of this painting's central location seems to lead to nowhere. (+)** while a sign above the central location in this painting advertises Phillies cigars for "only 5 cents." Painted by Edward Hopper, (*) for the points, what is this painting that depicts four people at a late-night diner?

ANSWER: **Nighthawks**

(19) **Near the poles of certain bodies, this layer has namesake "holes" that release stellar wind. The question of why this layer is hotter than the surface is the subject of a namesake heating problem. Mass ejections (+)** from this layer are associated with solar flares on one body, and this layer is only visible to the naked eye during total solar eclipses. Taking its name from the Latin for "crown," (*) for the points, what is this outermost layer of stars such as the sun?

ANSWER: Solar **Corona** (accept Stellar **Corona**; accept **Coronal** heating problem; accept **Coronal** mass ejections; prompt on "CME")

(20) **This composer honored Alessandro Manzoni with his *Requiem*, debuting in 1874, sections of which were featured at the funeral of Princess Diana. A statue of this man can be found on a trapezoidal traffic island named (+) for this man on Broadway in Manhattan along with four of his characters, including Leonora and Falstaff. (*)** For the points, name this Italian composer of operas such as *La Traviata* and *Aida*.

ANSWER: Giuseppe **Verdi** (or Giuseppe Fortunino Francesco **Verdi**; accept **Verdi** Square)

(21) **In one book by this author, the protagonist is told by his mother to harvest wheat, go to the mill, milk a cow, and collect an egg, before the titular items can be prepared. This author of *Pancakes, Pancakes* (+) worked with writer Bill Martin, Jr. for *Brown Bear, Brown Bear, What Do You See?*. The creator of *The Grouchy Ladybug*, (*)** for the points, who was this author and illustrator who also created *The Very Hungry Caterpillar*?

ANSWER: Eric **Carle**

(22) **This person wrote the book *The Future of Assisted Suicide and Euthanasia* and argued that the practice could eventually lead to duels. This person clerked with both Byron White and Anthony Kennedy. This jurist was accused of (+) stealing a seat that belonged to Merrick Garland. A Colorado-born Protestant jurist who was nominated before both Brett Kavanaugh (*) and Amy Coney Barret, for the points, who is this first of Donald Trump's Supreme Court nominees?**

ANSWER: Neil **Gorsuch** (or Neil McGill **Gorsuch**)

(23) **This figure destroyed the "stone things" needed to propel a boat across the river of the dead. Seven loaves of bread prove this figure fell asleep and is mortal. This figure travels to meet Utnapishtim [[OOT-na-PEESH-tim]] (+) to learn how to gain immortality before questing for a life-giving herb. This semi-divine hero was opposed by the wild man Enkidu [[EN-kee-doo]]. (*)** For the points, name this King of Uruk [[oo-ROOK]], the subject of a Mesopotamian epic.

ANSWER: **Gilgamesh** (or **Bilgames**; or **Pabilga-mes**; accept *The Epic of **Gilgamesh***)

(24) **These substances can be chemical or biological and perform the same overall function of enhancing a chemical process. These substances participate in the reaction (+) and can be used over and over again, such as enzymes used in digestion. (*)** For the points, name these substances which speed up reactions and are not consumed by the reaction.

ANSWER: **Catalysts**

(25) **A 23,000-square foot replica of this structure was constructed at Dallas Baptist University. Farmhouses near this estate were converted into apartments for students at the University of Virginia. (+)** A Felix Schlag [[SHLAHG]] image of this Neoclassical home appears on the reverse side of the U.S. nickel. Located just outside Charlottesville, (*) for the points, what is this plantation, the self-designed home of President Thomas Jefferson?

ANSWER: **Monticello**

(26) **This quantity is described as having an inverse relationship with unemployment according to Okun's Law. Bhutan uses a variant of this quantity abbreviated as GNH, which instead measures the country's happiness. (+)** Luxembourg and Qatar are constantly highly ranked in the "per capita" measurement of this quantity. Measuring the final amount of goods (*) and services produced by a country, for the points, what is this quantity?

ANSWER: **Gross Domestic Product** (do NOT accept "GDP Per Capita")

(27) **Modernization efforts by a man in this position allowed the French to build a railway through his home nation to Djibouti. That man in this position, Menelik II, repelled an Italian invasion (+) of his nation after the Battle of Adowa. Held by members of the Solomonid Dynasty, (*)** for the points, what is this position, once held by a man believed to be divine by the Rastafari, Haile Selassie?

ANSWER: **Emperor of Ethiopia** (accept **Negus**)

(28) **Despite being passed in 1862, this act granted rights to single women, immigrants, and former enslaved persons. Abraham Lincoln signed this law which was in effect in the contiguous states until 1976. (+)** This law initially allowed for the free acquisition of up to 160 acres of land and was the impetus for the Oklahoma (*) land rush. For the points, as part of what act did the U.S. government give away 300 million acres of land in an effort to boost westward expansion?

ANSWER: **Homestead** Act of 1862 (accept **Homestead** Act[s])

(29) **Mutations in the genes that code for these proteins cause epidermolysis [[eh-pih-der-MAH-lih-sis]] bullosa simplex. Excess production of these proteins can lead to a hardening commonly called cornification. (+)** The strength of these proteins is due to characteristic disulfide bridges, and the presence of these proteins in the epidermis keeps the skin waterproof. (*) For the points, name this class of proteins, the primary component of nails and hair.

ANSWER: **Keratins** (accept Cyto**keratin**)

(30) **The print rights to a film made by this man were sold to *Life* magazine, later having part of the proceeds donated to the family of police officer J.D. Tippitt. This man forced the media to withhold a frame which depicts the (+) fatal shot by Lee Harvey Oswald, and it depicts Jackie Onassis crawling on the back of a car. An 8 millimeter color "film" depicting the (*) Kennedy assassination is named for, for the points, what Ukrainian clothes manufacturer?**

ANSWER: Abraham **Zapruder** (accept **Zapruder** film)

Extra Questions

(1) **This writer used vernacular Tuscan to write works such as *La Vita Nuova*. This author cast themselves as the protagonist in a series of works that features figures such as Beatrice, Virgil, (+) and Satan. The author of *Paradiso*, *Purgatorio*, and (*) *Inferno*, for the points, who was this Italian poet who created the *Divine Comedy*?**

ANSWER: **Dante Alighieri** (accept either underlined portion; or Durante di Alighiero degli **Alighieri**; accept **Dante's *Inferno***)

(2) **This substance is commonly believed to have been discovered by Joseph Priestley. This chalcogen is the third-most abundant element in the Earth's atmosphere, and an allotrope of this substance (+) protects the planet from UV radiation. This non-metal was originally called "dephlogisticated air," and its current name was coined by Antoine Lavoisier. (*) For the points, name this chemical element necessary for human respiration.**

ANSWER: **Oxygen**

(3) **This country once referred to itself as the Republic of New Granada, and afterwards as the United States of [its current name]. Those states included Cundinamarca [[koon-deen-uh-MAR-kuh]] and Antioquia [[an-tee-oh-KEE-uh]], (+) the latter of which contains this country's city of Medellín [meh-deh-YEEN]]. This country formed a union with Ecuador and Venezuela (*) under its current name during the rule of Simón Bolívar. For the points, name this country that once named a "Gran" region of South America.**

ANSWER: Republic of **Colombia** (accept República de **Colombia**; accept Gran **Colombia**)