

Prelim Round 3

Tossups

(Tossup 1) A military feature named for this man was targeted by Operation Commando Hunt and Operation Barrel Roll. This man petitioned for the independence of his homeland at the Versailles conference. He was succeeded by Le Duan after his death in 1969, and his body was preserved in a granite mausoleum in Hanoi. For the point, name this founder of North Vietnam, the namesake of a city that was known as Saigon during the Vietnam War.

ANSWER: **Ho** Chi Minh

(Tossup 2) This religion's founding prophet was visited by Vohu Manah, and may have written the Gathas, a collection of poems. This religion's Vendidad describes rules for personal life, and is part of the Avestas. This religion's adherents inter the dead in towers of silence and worship in fire temples. Angra Mainyu and Ahura Mazda are the opposing gods of, for the point, dualistic religion named for a Persian prophet?

ANSWER: **Zoroastrianism**

(Tossup 3) Affine transformations can show that this property is exhibited at different scales by a fractal with itself. All parabolas have this property with respect to each other. Triangles with proportional, but not equal, side lengths will have this property if their angles are of equal measure. For the point, give this geometric term for figures of different sizes but the same shape, often compared with congruent shapes.

ANSWER: **similarity** (accept word forms)

(Tossup 4) Luis and Walter Alvarez hypothesized one cause for this event, which was spurred on by sharp drops in photosynthesis from plants and plankton. An impact crater 110 miles wide near the town of Chicxulub [chick-shoo-lub] on the Yucatan Peninsula is evidence for this event, which marks the beginning of the Cenozoic Era and end of the Mesozoic era. For the point, name this mass extinction event that occurred roughly 66 million years ago.

ANSWER: mass **extinction** of the **dinosaurs** (accept descriptive answers relating to the **end of the dinosaurs**; accept **Cretaceous-Paleogene extinction** event; accept **K-Pg extinction event**; accept **Cretaceous-Tertiary extinction** event; accept **K-T extinction** event; prompt on descriptions of an asteroid/comet/meteorite hitting Earth; "extinction" is not needed after it is read)

(Tossup 5) This author reworked his play *Battle of Angels* into *Orpheus Descending*, and wrote *The Night of the Iguana*. This man wrote about the shoe factory worker Tom Wingfield, whose sister collects animal figurines, and about Mae and Gooper's frustration with Maggie the Cat in *The Glass Menagerie* and *Cat on a Hot Tin Roof*. For the point, name this American playwright, the author of *A Streetcar named Desire*.

ANSWER: Thomas Lanier "Tennessee" **Williams** III

(Tossup 6) This man worked with his wife, Harriet Taylor, on ideas found in the essay *The Subjection of Women*. This thinker claimed that actions that restrict the freedom of others are only justified if they prevent hurt to others, an idea known as his harm principle. An ethical theory developed by Jeremy Bentham names a work by this thinker that advocated actions of the greatest good for all. For the point, name this author of *Utilitarianism* and *On Liberty*.

ANSWER: John Stuart Mill

(Tossup 7) In this novel, a sailor is thrown into the sea in place of his mentor, who becomes partially paralyzed after having a series of seizures. This novel's protagonist learns the location of Guido Spada's inheritance while being tutored by Abbé Faria, and escapes from the Château d'If [sha-toh DEEF] prison to seek revenge on men who falsely accused him of being a Bonapartist. Edmond Dantès becomes the title nobleman in, for the point, what novel by Alexandre Dumas?

ANSWER: The Count of Monte Cristo (accept Le Comte de Monte Cristo)

(Tossup 8) In one of this composer's operas, Ellen Orford is the love interest of the title fisherman. This composer wrote a requiem to commemorate the World War II bombing of Coventry Cathedral, and he wrote an educational work subtitled "Variations and Fugue on a Theme of Purcell" that sequentially highlights the various instruments. For the point, name this English composer of the opera *Peter Grimes* and *The Young Person's Guide to the Orchestra*.

ANSWER: Benjamin Britten

(Tossup 9) This phenomenon abnormally decreases with increasing velocity, an effect depicted on a Stribeck curve. This force is independent of surface area according to Amonton's second law describing it. Objects typically exhibit two coefficients related to this force, a static form and a kinetic form—both symbolized mu [mew]. This force for fluids is known as drag. For the point, name this force experienced between sliding surfaces that opposes the motion of an object.

ANSWER: friction (accept drag until it is read)

(Tossup 10) This man's *Report on Manufactures* encouraged the enactment of tariffs to protect fledgling industry. Under this man's guidance, Congress established the Revenue Cutter Service, the precursor to the Coast Guard. This politician served as aide-de-camp to George Washington and penned the majority of the Federalist Papers. For the point, name this man who created the First Bank of the US and served as first Secretary of the Treasury.

ANSWER: Alexander Hamilton

(Tossup 11) This woman used the pen name "Gul Makai" to publish articles about fighting in the district of Swat. During a 2013 UN event commemorating this woman, she wore a shawl that belonged to Benazir Bhutto. In 2012, this woman was airlifted to Peshawar after being shot by a member of the Taliban on the way back from an exam. For the point, name this Pakistani activist for women's rights, particularly education, who won the 2014 Nobel Peace Prize at age 17.

ANSWER: Malala Yousafzai (accept either underlined name)

(Tossup 12) This novella's protagonist recognizes a man in a white waistcoat chained to an iron safe, who is distressed that he cannot help a woman and her baby. A character in this novella relives getting rejected by Belle during his youth, when he worked with Dick Wilkins for Mr Fezziwig. A vision in this novella predicts a possible future involving Bob Cratchit and his son, Tiny Tim, and is revealed by the Ghost of Christmas Yet to Come. For the point, name this Charles Dickens novella about Ebenezer Scrooge.

ANSWER: A Christmas Carol

(Tossup 13) An accompanying case to this case, *Briggs v. Elliott*, first introduced the doll test to prove feelings of inferiority. The phrase "all deliberate speed" was used in this case's follow-up and resulted in "Massive Resistance" from the South. The chief counsel for one side in this case was Thurgood Marshall. For the point, name this 1954 Supreme Court case that overturned "separate but equal" policy and began the process of school desegregation.

ANSWER: Brown v. Board of Education of Topeka, Kansas

(Tossup 14) The P680 and P700 reaction centers are found within this organelle in structures respectively known as PS2 and PS1. The endosymbiosis of a cyanobacteria is the likely source of this organelle, which is where the Calvin cycle occurs. Certain molecules in this organelle absorb red and blue light while reflecting green light. For the point, name this organelle that is the primary site of photosynthesis.

ANSWER: chloroplasts

(Tossup 15) In this novel, Hastie Lanyon dies of shock after visiting his friend's home, and Richard Enfield extorts one hundred pounds from a man who he witnessed trampling a small child in the street. The discovery of a broken cane in this novel makes Gabriel Utterson worry that his friend is being blackmailed by the man who murdered Sir Danvers Carew. For the point, name this novella by Robert Louis Stevenson, in which a scientist named Henry creates a serum that transforms him into a vicious man without a conscience.

ANSWER: The Strange Case of Dr Jekyll and Mr Hyde

(Tossup 16) This body of water's Goodsell Ridge is home to an old rock formation known as Chazy Reef. A prominent lighthouse can be found on this body's Valcour Island, whose northern portion is within the town of Plattsburgh. The cities of Burlington and Ticonderoga are on this lake, which drains into Richelieu River and then into the St. Lawrence River. For the point, name this lake on the Vermont-New York border that is named for a French explorer.

ANSWER: Lake Champlain

(Tossup 17) This sculpture's figures rest on a rock at Golgotha. This work, currently housed in St Peter's Basilica, is the only sculpture signed by its artist; his name appears on the sash of a female figure in this work, who holds a man whose hands are wounded, but whose forehead is not marked by a crown of thorns. For the point, name this Michelangelo work showing a young Mary holding the body of Jesus.

ANSWER: Pietà

(Tossup 18) This speech is recorded in the Bancroft copy and the Everett copy, the latter of which was given to the man whose speech preceded this one. This speech states “we cannot dedicate, we cannot consecrate, we cannot hallow this ground” and describes soldiers who gave their “last full measure of devotion” to the cause of liberty. For the point, name this speech that begins “Four score and seven years ago,” delivered on a Pennsylvania battlefield by Abraham Lincoln.

ANSWER: Gettysburg Address

(Tossup 19) Urbain Le Verrier suggested that this planet’s peculiar orbit was caused by the existence of a small planet called Vulcan. In 2011, the *Messenger* probe began orbiting this planet, discovering water in its exosphere. This planet, the only one in the solar system besides Venus to not have a moon, has nearly no atmosphere because it is constantly blasted with solar wind. For the point, name this closest planet to the Sun.

ANSWER: Mercury

(Tossup 20) This religious figure quoted Isaiah to tell the Pharisees that he was “a voice shouting in the wilderness.” Zechariah regained the ability to speak after he wrote this man’s name on a tablet. This religious figure “jumped” in his mother, Elizabeth’s, womb when she met Mary, and he saw the Holy Spirit descend “like a dove” while he performed his namesake action on a holy man for whom he had “prepared the way.” For the point, name this biblical man who consecrated Jesus in the Jordan River.

ANSWER: Saint John the Baptist (prompt on “John” or “Saint John”)

(Tossup 21) This organism names a coastal city immediately southwest of Coconut Grove and Miami that is home to the University of Miami. New Caledonia is on the eastern end of a body of water named for this organism found between the Solomon and Tasman Seas. These organisms have been subject to significant bleaching along a major geographic feature off the coast of Queensland. For the point, name these organisms that make up Australia’s Great Barrier Reef.

ANSWER: corals (accept Coral Gables; accept Coral Sea)

(Tossup 22) In this play, a man suggests that “the world, too saucy with the gods / incenses them to destruction” after experiencing an earthquake and meeting a lion. A ghost in this play is predicted to “cry ‘Havoc!’ and let slip the dogs of war” and warns of defeat at Philippi while appearing to Marcus Antonius. This play’s title man ignores a soothsayer who had warned “beware the Ides of March.” Cassius and Brutus plot to kill the title dictator of Rome in, for the point, what Shakespeare tragedy?

ANSWER: The Tragedy of Julius Caesar

(Tossup 23) Works created alongside this painting include studies of the Alpile [al-PEE-ah] mountains and *Wheat Field with Cypresses*. In this painting, a white church spire in the village of Saint Rémy-de-Provence [son ray-MEE duh proh-VONSS] sits behind a looming cypress in the foreground and under a strangely luminescent crescent moon. For the point, name this Vincent van Gogh painting of a darkened sky lit by swirling balls of light.

ANSWER: The Starry Night (accept De Sterrennacht)

(Tossup 24) This man supposedly called his wife a “Flanders mare” due to differences between her actual face and a portrait commissioned by Hans Holbein. The creation of the Anglican Church stemmed from a marriage this king hoped to end. Unlike Thomas Wolsey, advisor Thomas Cromwell succeeded in aiding this king to annul a marriage with Anne Boleyn. His daughters Mary and Elizabeth would later be monarchs in the Tudor Dynasty. For the point, name this English king who married six wives.

ANSWER: Henry VIII

(Tossup 25) The Organ of Corti contains hair cells that are important in the perception of this sense. This sense is first perceived by the tympanic membrane before it is passed on to the incus, malleus, and stapes, three of the smallest bones in the human body. A condition where a type of this type of sense is perceived nonstop is known as tinnitus. People with disorders involving this sense can get cochlear implants. For the point, name this sense that perceives sounds and detected by the ear.

ANSWER: hearing or auditory perception

(Tossup 26) After a young girl in this novel witnesses the death of Lottchen’s baby sister, Dr Bangs and Hannah Mullet care for her while her sister is sent away to Plumfield to escape scarlet fever. John Brooke joins the Union army in this novel, in which the German immigrant Fritz Bhaer marries a young novelist and Theodore “Laurie” Laurence marries Marmee’s youngest daughter. For the point, name this novel by Louisa May Alcott about the sisters Meg, Jo, Beth, and Amy.

ANSWER: Little Women

(Tossup 27) The distance between two points in a Cartesian coordinate system can be derived via this theorem, which is generalized by the Law of Cosines. A proof of this theorem uses a trapezoid and was presented by James Garfield. Triples of numbers such as 5, 12, and 13 or 3, 4, and 5 satisfy, for the point, what theorem that equates the sums of the squares of the legs of a right triangle to the square of the hypotenuse?

ANSWER: Pythagorean Theorem (or Formula, etc.)

(Tossup 28) These creatures abducted Hylas while he was traveling with the Argonauts. Iynx and Syrinx were two of these creatures, twenty of whom served as handmaidens to Artemis. Groups of these creatures included the Oreads and Naiads, who lived near mountains and fresh water, respectively. Echo was one of, for the point, what minor deities in Greek myth who were associated with nature?

ANSWER: nymphs (accept river nymphs or specific types of nymphs like Nereids or Oreads)

(Tossup 29) The “green” form of this substance occurs naturally in the rock fougérite. Bluing is one method of preventing the formation of this substance, while galvanization combats this substance by applying a coat of molten zinc. A layer of chromium oxide on the top of stainless steel prevents the formation of, for the point, what corrosive reddish oxide that forms on iron or steel when exposed to water or air?

ANSWER: rust (prompt on “iron (III) oxide;” prompt on “iron(iii) oxide-hydroxide”)

(Tossup 30) This man outlined his Thirteen Virtues in an autobiography whose opening section is addressed to the last Royal Governor of New Jersey. This man, who once used the pseudonym Silence Dogood, created a picture of a cut up snake titled *Join, or Die* to spur Anti-British sentiment. Poor Richard's Almanack was published by, for the point, what Pennsylvanian Founding Father who flew a kite during a thunderstorm?

ANSWER: Benjamin Franklin

Replacements

(Tossup 31) One way to solve an equation of this type involves calculating a quantity whose denominator includes a "2 times a" term and whose numerator includes a discriminant. Completing the square is another way to solve these equations, whose main expression can be factored into two linear terms. Solving these equations graphically involves drawing a parabola. For the point, name this type of algebraic equation that involves an x squared term and that can be solved by a commonly memorized formula.

ANSWER: quadratic equation (accept quadratic formula, quadratic expression, etc.)