

LADUE INVITATIONAL SPRING TOURNAMENT 2013

Round 6

TOSS-UPS

1. This country lies at the southern end of the Brenner Pass and contains the Aosta Valley. Lakes Garda and Como are located in this country, and the Adige flows through its province of South Tyrol. One of this country's island possessions lies south of the Tyrrhenian Sea, while another lies across the Strait of Bonifacio from (*) Corsica. Taranto and Trieste are cities in this country, which contains the Dolomites and Apennines and shares Mont Blanc with France. Its Po River flows into the Adriatic Sea, while its Arno River flows past Florence and Pisa. For ten points, name this country which contains cities like Naples, Venice, and Rome.

ANSWER: Italy (or Italian Republic)

<JD>

2. The *Rubaiyat* describes "the sultan's turret" caught in a noose of this stuff, and "September 1, 1939" mentions "ironic points of" it. "My Last Duchess" describes the "dropping of" one kind of this entity "in the West," and the narrator of a Robert Frost poem has "outwalked the furthest" one. "Dover Beach" claims the world "hath neither joy, nor love, nor" this stuff, and Milton's "On His (*) Blindness" begins "when I consider how" it "is spent." For ten points, identify this entity which Dylan Thomas tells us to "rage, rage against the dying of," the word for which is used to describe a charging brigade in a Tennyson poem.

ANSWER: light (accept elaborations like "the furthest city light" or daylight)

<MS>

3. This country's *Zemene Mesafint*, or "Era of the Princes," ended when Kassa became emperor, and, with its eastern neighbor, this country fought the Ogaden War. One government in this modern-day country was headed by Tafari Benti and Mengistu. This country, once home to the communist Derg regime and Emperor Tewodros II, defeated (*) Italy while led by Menelik II at the Battle of Adowa, but was later conquered while under the rule of Haile Selassie. For ten points, name this Horn of Africa country which has its capital at Addis Ababa.

ANSWER: Ethiopia (accept Eritrea anywhere before Addis Ababa, because all those things happened before it became independent)

<MS>

4. One practitioner of this religion was killed by her schizophrenic son and was named Elli Perkins. People in this faith move up the Bridge to Total Freedom, and they practice the "good roads, fair weather" policy. A spiritual cleansing process known as "auditing" helps its members move from a Clear state to that of an Operating (*) Thetan. According to this religion, millions were killed on Earth with hydrogen bombs set off by the alien Xenu. This faith's "space opera cosmogony" was laid out by its founder, who wrote *Dianetics*. For ten points, identify this religion created by L. Ron Hubbard and practiced by people like Tom Cruise.

ANSWER: Church of Scientology

<MS>

5. The Foehn ["fain"] type of this phenomenon is caused by adiabatic warming, and ergs formed by it are concentrated between 20 and 40 degrees latitude. In the station model, its magnitude is denoted by flags and pennants stemming from a barb, and isotachs indicate where it occurs at the same speed. In the (*) doldrums, the prevailing form of it is weak, and this phenomenon causes erosion by aeolian processes. It is rated on the Beaufort scale, and an anemometer measures its speed. The trade ones occur near the equator, and it causes ocean surface waves. Monsoons are seasonal types of, for ten points, what meteorological phenomenon, the movement of air?

ANSWER: winds

<HX>

6. In a painting in one of these buildings, four blacks point spears towards the water while the massive central figure watches a Hippopotamus Hunt, a relief intended to provide food for the *ka*. One sculpture found in one of these objects stands rigidly with left foot forward, and depicts Menkaure. An often-ruined chapel was built between the paws of a animal guarding some of them, and the earliest type of these buildings was the (*) mastaba, which Imhotep stacked atop each other for Djoser. Many of these structures are located in the Valley of the Kings. For ten points, identify these structures, the most famous of which was made for Khufu and is located in Giza.

ANSWER: Egyptian tombs or pyramids (accept mastabas before mentioned, prompt on tombs)

<MS>

7. The amount of this element in a substance can be determined with the Dumas and Kjeldahl methods. A process that combines this element with hydrogen typically uses a porous iron catalyst prepared by reducing magnetite. Four atoms of this element are bonded to the iron in a heme group, and it is bonded with two hydrogen atoms in an (*) amine group. Legumes engage in a symbiotic relationship with *Rhizobium* bacteria because of their ability to “fix” this element into a more usable form. Its triply-bonded diatomic molecule is the most common in Earth’s atmosphere. For ten points, identify this element found in fertilizers and ammonia, with symbol N.

ANSWER: nitrogen

<MS>

8. Agathocles led an expedition against this city and forced it to withdraw troops from Syracuse, and in a war with Epirus, this city sued for peace but was denied by Pyrrhus. This city was home to navigators like Hanno and Himilco, and one military leader from this city attacked Saguntum at the start of a war. This city’s army won victories at (*) Trebia and Lake Trasimene in a war begun after Cato the Elder declared that this city “must be destroyed”, and he crossed the Alps with his war elephants. For ten points, name this African city home to Hannibal Barca, which lost to Rome in the Second Punic War.

ANSWER: Carthage

<SC>

9. In this novel, Lebezyatnikov exposes another character after he slips a hundred-ruble note in a girl’s pocket. This novel’s protagonist refuses copying work given to him by his university friend Razumikhin, and he also receives a letter from his mother Pulkheria telling of his sister’s engagement to Luzhin. Porfiry Petrovich mistakenly (*) investigates a pair of painters in this novel, not long after Alyona Ivanova and Lizaveta are found murdered. For ten points, identify this novel in which the creepy Svidrigailov and prostitute Sonya make the acquaintance of Raskolnikov, who murdered a pawnbroker with an axe, a work of Fyodor Dostoevsky.

ANSWER: Crime and Punishment (or Prestupleniye i nakazaniye)

<MS>

10. Fernando Belaunzaran recently introduced a bill for this purpose in his home country, claiming it’s a “matter of life or death” in Mexico, and 1975’s *Ravin v. State* established it inside the home in Alaska. Ted Kennedy’s son Patrick is leading opposition to this action in the Rhode Island state legislature. The (*) California Supreme Court recently struck down all amendments to Prop. 215, effectively completely doing this if it is for medical purposes. For ten points, identify this action sought by successful ballot measures in Washington and Colorado, which allows possession of a certain drug.

ANSWER: legalizing marijuana (generously accept equivalents)

<MS>

HALFTIME

11. Roger Boisjoly’s warnings went unheeded the day before this event, which prompted the President to postpone the State of the Union address and give the “Touched the face of God” speech. The last recorded words by a person involved in this event were Pilot Michael Smith’s “Uh oh”. The Rogers Commission investigating this event included Richard Feynman, who famously dropped an (*) O-ring in cold water. This event resulted in the death of Christa McAuliffe, who was the first to participate in the Teacher in Space program. For ten points, identify this 1986 event in which a space shuttle broke up less than two minutes after takeoff.

ANSWER: Space Shuttle Challenger disaster (accept equivalents)

<MS>

12. The orchestra plays in this style for most of the scherzo of Tchaikovsky’s fourth symphony and also enters in this manner after the brass solo at the beginning of Rimsky-Korsakov’s *Russian Easter Overture*. It names a polka composed collaboratively by Johann and Josef Strauss, and the ninth variation of Paganini’s 24th violin caprice employs the (*) “left-hand” form of this technique. The fourth movement of Berlioz’s *Symphonie Fantastique* uses it to depict the rolling of a severed head, and Bartok names a type of this technique where the string slaps loudly against the fingerboard. For ten points, name this technique where string players pluck the strings with their finger.

ANSWER: pizzicato (accept plucking before mention)

<HX>

13. A Refutas equation can be used to calculate this quantity for a mixture, and one form of it is the numerator of the Prandtl number. The ratio of buoyant force to the force caused by it is given as the Grashof number. This property is increased when rheopectic substances are agitated, while it is reduced for (*) thixotropic compounds. It can be measured using a Zahn cup, and its kinematic form can be calculated by dividing its absolute form by mass density. This property can be characterized by a Reynolds number, and it is constant for Newtonian fluids and zero for superfluids. For ten points, identify this measure of a fluid's resistance to flow.

ANSWER: viscosity or viscous force

<EnC>

14. A character in this novel is noticed to be no longer in Chess Club, leading the protagonist to suspect the death of the dictionary-writing Syme. This novel's protagonist viewed sleeping with his wife as a duty and almost pushed her off a cliff before leaving her, and he makes note of his varicose veins. One book within this book discusses the saying (*) "War is Peace," and was written by the man reviled during the Hate Week, Emmanuel Goldstein. This novel's protagonist is convinced by O'Brien to betray Julia after facing rats in Room 101. For ten points, identify this novel in which Winston Smith winds up loving Big Brother, written by George Orwell.

ANSWER: 1984

<MiP>

15. One game in this series intersperses developer commentary with a mission to destroy a monastery-based artillery launcher. The Seven Hour War is won by an army whose forces include Hunters and the Overwatch in this series, leading to the setup of a Breen-led government in City 17. In a recent installment, this series' protagonist befriends the (*) Combine-enslaved Vortigaunts, who heal Alyx Vance, and is employed by the mysterious G-Man. Three games in this series are included in *The Orange Box*, and the signature weapon of its protagonist is his crowbar. For ten points, identify this series of video games produced by Valve, which center on Black Mesa's alien-fighting physicist Gordon Freeman.

ANSWER: Half-Life (accept any specific *Half-Life* games)

<MS>

16. This ruler was the target of an attempted ouster led by Charles Neville and Thomas Percy called the Rising of the North. This monarch was excommunicated by Pius V's *Regnans in Excelsis* partially due to this ruler's policy of latitudinarianism and motto of "Video et taceo". (*) Francis Walsingham uncovered plots by Roberto di Ridolfi and Anthony Babington that aimed to kill this ruler, and after her death, the Stuart dynasty replaced the Tudor dynasty when James I ascended to the throne. For ten points, name this "Virgin Queen" of England who sent Francis Drake to defeat the Spanish Armada.

ANSWER: Elizabeth I of England (prompt on "Elizabeth")

<KT>

17. After his death, this man married Medea in the Isles of the Blessed. Odysseus found him disguised as a princess in the court of King Lycomedes of Skyros after this figure showed more interest in weapons than trinkets. After his consort Briseis is taken away, this father of Neoptolemus refuses to fight. The *Iliad* opens with the (*) "Rage" of this figure, whose friend Patroclus died while fighting in this man's armor. He mangled the body of Hector after their duel, and this son of Peleus and Thetis was nearly invulnerable because he had been bathed in the Styx as a child. For ten points, name this Greek hero killed by an arrow to the heel.

ANSWER: Achilles (or Akhilleus)

<BZ>

18. Curves named after this shape have equation $y^2 = x^3 + ax + b$ and were used to help prove Fermat's Last Theorem. If points A, B, and C are marked on a trammel, and B and C are allowed to move freely on two perpendicular lines, then A will trace out one of these figures. These simplest Lissajous figures are the shapes of the paths of objects trapped in (*) orbit by inverse-square forces like gravity. This figure with positive eccentricity less than one has area equal to pi times the product of its semi-axes, and this figure is the set of all points the sum of whose distances to two foci are constant. For ten points, identify this oval-shaped conic section.

ANSWER: ellipses

<MS>

19. He's not Boltzmann, but the value of one quantity named after this scientist was verified using the diffusion coefficient of Brownian motion by Jean Perrin. One of his laws can be used to calculate atomic weights and states that under constant temperature and pressure, equal volumes of gases contain the same (*) number of molecules. His namesake constant is equal to the ideal gas constant divided by Boltzmann's constant and is the number of particles in a mole. For ten points, identify this scientist whose constant equals approximately 6.022 times ten to the twenty-third.

ANSWER: Lorenzo Romano Amedeo Carlo Avogadro di Quaregna e di Cerreto

<EnC>

20. This psychologist suggested that boys are struggling due to social awkwardness caused by video games and porn in *The Demise of Guys*, and also implemented the "social fitness model" by founding The Shyness Clinic. He placed cars lacking license plates in the Bronx and Palo Alto to test the broken-window theory, and he proposed his ideas of why good people turn evil in (*) *The Lucifer Effect*. One participant in this man's most famous experiment emulated Strother Martin's character from *Cool Hand Luke*, and was nicknamed John Wayne. That experiment saw volunteers designated "guards" begin to abuse their power. For ten points, name this American psychologist who conducted the Stanford Prison Experiment.

ANSWER: Philip Zimbardo

<HX>

End of regulation, only proceed if tied

21. In one of this author's unfinished works, Ushant, the Duke of Tintagel, marries Nan St. George. In another of her novels, the protagonist ultimately divorces Raymond De Chelles to re-marry Elmer Moffatt. In addition to writing *The Buccaneers* and about Undine Spragg in *The (*) Custom of the Country*, this author wrote a novel in which Mattie Silver and the protagonist try to commit suicide via sled-ride into a tree. May Welland's husband Newland Archer has an affair with Ellen Olenska in a work by, for ten points, what author of *Ethan Frome* and *The Age of Innocence*?

ANSWER: Edith Wharton

<KT>

22. One painting by this man shows a troubling inscription in Greek at the top about a future apocalypse juxtaposed with joyous dancing and celebration in a stable on the bottom. This artist painted a baby Jesus holding a pomegranate while the Virgin Mary is being crowned by two angels. In addition to *The (*) Mystic Nativity* and *Madonna of the Magnificat*, he painted Hermes picking a fruit while Chloris is being kidnapped by Zephyr and another work in which the title figure stands impossibly upon a seashell. For ten points, name this Renaissance painter of *Primavera* and *The Birth of Venus*.

ANSWER: Sandro Botticelli

<SK>

BONUSES

1. Bonus: The central carriage of this short story is stopped in the village of Totes. For ten points each:

[10] Identify this short story, whose title prostitute, Elizabeth Rousset, is eventually forced to sleep with a Prussian officer.

ANSWER: “Boule de Suif” (or “Ball of Fat”)

[10] This other short story by the author of “Le Horla” sees Mathilde Loisel lose the title piece of jewelry, though she ultimately finds out it was a cheap fake.

ANSWER: “The Necklace” (or “The Diamond Necklace” or “La Parure”)

[10] Guy de Maupassant wrote “The Necklace.” He also penned “Le Horla”, about an invisible Brazilian one of these creatures. A more famous one is stopped from terrorizing England by Van Helsing in a Bram Stoker novel.

ANSWER: vampire

<MS>

2. Bonus: Answer these questions about phase diagrams, for ten points each:

[10] The gas-liquid boundary on a phase diagram no longer exists at this point. At pressures and temperatures above this point, the substance has properties of both liquids and gases.

ANSWER: critical point

[10] Crossing the solid-liquid boundary from left to right gives this phase transition. Ice turning into liquid water is a common example of this process.

ANSWER: melting

[10] In freezing point depression, the melting temperature can be lowered by adding a solute. The amount by which it decreases is equal to $K_{\text{sub-f}}$ times the van't Hoff factor times this measure of concentration.

ANSWER: molality (prompt on m, do not accept molarity)

<MS>

3. Bonus: This character encourages licking your palms to pretend to be sick. For ten points each:

[10] Identify this character who takes a ‘day off’ in a John Hughes film, skipping school with his friends Cameron and Sloane.

Answer: Ferris Bueller (accept either)

[10] At the climax of the film, Cameron causes a red one of these objects owned by his father to go flying out the window and land broken on the ground.

Answer: Ferrari (accept car)

[10] To get into the restaurant *Chez Quis*, Ferris pretends to be Abe Froman, Chicago’s king of this commodity.

Answer: Sausage

<CC>

4. Bonus: For ten points each, answer the following about the founding of an Italian city:

[10] This man founded Rome with his brother Remus, but later killed him for criticizing the height of the city’s walls.

ANSWER: Romulus

[10] Romulus ordered a kidnapping of this tribe’s women to provide wives for the inhabitants of Rome. In retaliation, their king Titus Tatius attacked Rome, only to be stopped when the women threw themselves before the troops.

ANSWER: Sabines (or Sabini)

[10] This daughter of Numitor and Vestal Virgin was the mother of Romulus and Remus. Amulius ordered her children’s execution, but she managed to put them in a basket on the Tiber River.

ANSWER: Rhea Silvia

<BZ>

5. Bonus: The “Western” one of these was resolved by the Council of Constance. For ten points each:

[10] Identify these breaks and splits in the Christian church. The “Great” one resulted in the formation of the Catholic Church, while the “Western” one saw three popes ruling simultaneously.

ANSWER: schisms (accept Western Schism or Great Schism)

[10] Prior to the Western Schism, the papacy was located solely in this modern day country’s city of Avignon (“ah-vin-yon”), and the Hundred Year’s War between this country and England helped prolong the schism.

ANSWER: Kingdom of France (or Royaume de France)

[10] After the Council of Constance, these wars were fought against Bohemians who followed the teachings of a namesake Czech reformer. Until his death, Jan Zizka led the radical Taborite faction to victories in these wars.

ANSWER: Hussite Wars

<BZ>

6. Bonus: He proposed a thought experiment in which people placed behind the “veil of ignorance” have no knowledge of their abilities or entitlements. For ten points each:

[10] Name this American philosopher whose “original position” parallels the “state of nature”. He argued that inequalities in society should benefit the least advantaged, his “difference principle”.

ANSWER: John Rawls

[10] Rawls described this concept as a combination of liberty and equality in a work titled [this] *as Fairness*. His *A Theory of* [this] was refuted by Robert Nozick in *Anarchy, State, and Utopia*, and it’s sometimes also defined as “giving each his due”.

ANSWER: justice

[10] This other philosopher discussed whether natural law permitted inequalities in his *Discourse on the Origin of Inequality*. He stated that “man is born free, and everywhere he is in chains” in *The Social Contract*.

ANSWER: Jean-Jacques Rousseau

<HX>

7. Bonus: One response to this poem mentions a girl who is a “sort of mournful cosmic last resort.” For ten points each:

[10] Identify this poem beginning “The sea is calm to-night” before describing how “Sophocles long ago” heard “the eternal note of sadness” “upon the Aegean.”

ANSWER: “Dover Beach”

[10] “Dover Beach” was written by this author of *The Scholar Gipsy* and *Empedocles on Etna*.

ANSWER: Matthew Arnold

[10] This Arnold poem describes Oxford’s “dreaming spires” and takes its title from a character in the *Eclogues*. It was written after the death of his friend Arthur Hugh Clough.

ANSWER: “Thyrsis”

<MS>

8. Bonus: Two women work inside the doorways of a brick building in *The Little Street*, a depiction of this city. For ten points each:

[10] Identify this city in the Netherlands, pictured in a famous painting which shows five people near a boat on the left, while several boats dock on the other side of a river. That painting’s artist may have used a *camera obscura*.

ANSWER: Delft

[10] This other painting by the artist of *View of Delft* shows a girl with a blue headband and the title accessory looking at the viewer. It is sometimes called the “*Mona Lisa* of the North.”

ANSWER: Girl with a Pearl Earring (or Het Meisje met de Peral)

[10] This Dutch Golden Age artist painted *View of Delft* and *Girl with a Pearl Earring*, as well as a woman pouring the title drink in *The Milkmaid*.

ANSWER: Johannes Vermeer

<MS>

9. Bonus: Many of those who orchestrated this event were assassinated during Operation Nemesis. For ten points each:

[10] Identify this event in which over a million people of a certain Caucasian nationality were forcibly resettled and killed, perpetrated by the Ottoman Empire during World War I.

ANSWER: Armenian Genocide (accept equivalents like Armenian Massacre; prompt on “Great Crime” or “Medz Yeghern”)

[10] Under Article 301 of this country’s penal code, it is forbidden to label the post-World War I deaths of Armenians as a genocide. It was home to an empire centered at Constantinople and was first led by Mustafa Atatürk.

ANSWER: Republic of Turkey (or Türkiye Cumhuriyeti)

[10] The presence of Article 301 is a major obstacle in Turkey’s attempt to perform this action. Angela Merkel has stated that Turkey should seek to be a “privileged partner” instead of trying to do this.

ANSWER: joining the European Union (accept equivalents for “joining” like “incorporation into” or “accession into”; accept EU in place of “European Union”)

<BZ>

10. Bonus: High amounts of this substance can cause Minamata disease. For ten points each:

[10] Name this heavy metal toxin, whose “methyl” form can accumulate in the human body. The meat of large fish like tuna and marlin contain especially high levels of this substance.

ANSWER: methylmercury

[10] Animals high in the food chain often contain high levels of toxic substances because of this process. This phenomenon causes toxins to accumulate and become more concentrated in the higher trophic levels.

ANSWER: biomagnification (accept bioaccumulation; prompt on “magnification” or “accumulation”)

[10] Biomagnification particularly affect the “apex” type of these animals, such as the bald eagle and the tuna, since they are at the top of the food chain. This type of animal hunts prey.

ANSWER: predators

<BZ>

11. Bonus: In this occasion, a cup is set aside for Elijah. For ten points each:

[10] Identify this festive event occurring on the 14th of Nisan, which marks the beginning of a certain weeklong holiday. During it, the youngest child asks the Four Questions, and it includes the hiding of the matzah afikomen.

ANSWER: seder

[10] The seder is a meal during this holiday, which celebrates the exodus of Jews from slavery in Egypt.

ANSWER: Pesach or Passover

[10] One of these texts is typically read aloud during the seder. Arthur Syzk’s illustration of one of these books was unsurprisingly critical of Hitler, and the Bird’s Head one is the oldest existing one.

ANSWER: Haggadah

<MS>

12. Bonus: This play’s title character loses Katrin, Eilif, and Swiss Cheese. For ten points each:

[10] Identify this play, in which Anna Fierling tries to peddle her wares during the Thirty Year’s War.

ANSWER: Mother Courage and Her Children (or Mutter Courage und ihre Kinder)

[10] *Mother Courage and Her Children* is a work by this German practitioner of “epic theatre,” who collaborated with Kurt Weill on *The Threepenny Opera*.

ANSWER: Bertolt Brecht

[10] Brecht’s *The Resistible Rise of Arturo Ui* is about a cauliflower racketeer in this Midwestern American city, which Sandburg described as the “hog butcher of the world.”

ANSWER: Chicago

<MS>

13. Bonus: This man defeated Martha Coakley in a special election for Ted Kennedy's Senate seat. For ten points each:
 [10] Identify this politician from Massachusetts who was beaten by Elizabeth Warren in his 2012 re-election bid.

ANSWER: Scott **Brown**

[10] Scott Brown may have another shot at the Senate after this senior Massachusetts senator and failed 2004 Democratic presidential candidate was confirmed as Secretary of State.

ANSWER: John **Kerry**

[10] Because Kerry resigned his Senate seat, this Democratic governor of Massachusetts appointed temporary office-holder Mo Cowan until a special election could be held.

ANSWER: Deval **Patrick**

<DA>

14. Bonus: Answer the following about the trans-Atlantic slave trade, for ten points each:

[10] Slaves were shipped from Africa to the Americas in this most brutal leg of the "Triangular Trade."

ANSWER: **Middle Passage**

[10] Slaves and other cargo were often traded for this liquor, which was distilled from molasses made in the West Indies. It was combined with water or beer to form the grog given to British sailors.

ANSWER: **rum**

[10] One notable incident on the Middle Passage was when the captain of the ship *Zong* did *this* to all the slaves in the cargo hold. JMW Turner depicted the event in his *The Slave Ship*.

ANSWER: **drowning** them to collect insurance money (or **throwing** them all **overboard**, prompt on "killing them", accept anything that implies the slaves met with a watery demise, prompt generously)

<MS>

15. Bonus: Electrons with principal quantum number 2 can only be found in these two orbitals. For ten points each:

[10] These two letters denote the two orbitals in the second energy level. One is spherical and can hold two electrons, while the other is shaped like a dumbbell can contain six.

ANSWER: **s** and **p** (accept in either order; prompt on partial)

[10] S and P also name waves released by these events. They can cause tsunamis if they occur offshore, and their magnitude is quantified by the Richter scale.

ANSWER: **earthquakes**

[10] Electromagnetic waves can undergo "s" and "p" types of this phenomenon, in which the orientations of the waves' oscillations are aligned.

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

<MiP>

16. Bonus: Gian Carlo Menotti's *Amahl and the Night Visitors* was the first one composed for TV. For ten points each:

[10] Name this type of musical work, the earliest known one of which is *L'Orfeo*. It combines a libretto text with music, and is performed in venues such as La Scala and a "house" named after it in Sydney, Australia.

ANSWER: **opera**

[10] *L'Orfeo* is the first opera of this Italian composer, whose *L'Arianna* tells the story of Ariadne and Theseus. He also composed an opera based on the *Odyssey* entitled *Il ritorno d'Ulisse in patria*.

ANSWER: Claudio **Monteverdi**

[10] This last opera by Monteverdi concludes with the title character's crowning as Nero's empress in the duet "Pur ti miro, pur ti godo". It is the only one of Monteverdi's operas not based in mythology.

ANSWER: *L'incoronazione di Poppea* or *The Coronation of Poppea*

<HX>

17. Bonus: In this novel, Herb purchases a life insurance policy, only to be killed the next day. For ten points each:

[10] Name this true crime novel in which Dick Hancock and Perry Smith murder the wealthy Clutter family in the hopes of striking it rich.

ANSWER: **In Cold Blood**

[10] This author of *Other Voices*, *Other Rooms* and *The Grass Harp* wrote *In Cold Blood*. He was close childhood friends with Harper Lee, who accompanied him to Kansas to research for *In Cold Blood*.

ANSWER: Truman **Capote** (accept Truman Streckfus **Persons**)

[10] In this Capote novella, Holly Golightly likes to host parties at her Manhattan apartment, where she meets the Brazilian diplomat José Ybarra-Jaeger and later becomes engaged to him.

ANSWER: **Breakfast at Tiffany's**

<EnC>

18. Bonus: This man led a march of grape-growers from Delano to Sacramento. For ten points each:

[10] Identify this man who, along with Dolores Huerta, founded the National Farm Workers Association, which mobilized poor Hispanics working in farms in the Southwest..

ANSWER: Cesar **Chavez**

[10] On one march opposing illegal immigration, Chavez was accompanied by this man, who organized the Montgomery Bus Boycott with MLK and led the SCLC after the latter's assassination.

ANSWER: Ralph **Abernathy**

[10] Also participating in the anti-immigration march was Walter Mondale, who was later this man's Vice President. This Georgia native was defeated in his 1980 re-election bid by Ronald Reagan.

ANSWER: Jimmy **Carter**

<MS>

19. Bonus: The Davisson-Germer experiment confirmed this theory by observing the scattering of electrons. For ten points each:

[10] Identify this principle of quantum mechanics that was partially illuminated by Einstein's use of light quanta in his explanation of the photoelectric effect.

ANSWER: **wave-particle duality** (accept **complementarity** or anything close to **behaving like a wave and particle**)

[10] This French physicist's namesake hypothesis states that any moving object has an associated wavelength that is proportional to Planck's constant.

ANSWER: Louis-Victor-Pierre-Raymond, 7th duc **de Broglie**

[10] The de Broglie wavelength of a non-relativistic particle is inversely proportional to this vector quantity, the rate of change of an object's position.

ANSWER: **velocity** (prompt on "v" or "speed")

<EnC>

20. Bonus: This state's Wheeler Peak lies in the Sangre de Cristo Mountains. For ten points each:

[10] Name this state bisected by the Rio Grande which contains White Sands National Monument and cities like Alamogordo, Las Cruces, Albuquerque, and Santa Fe.

ANSWER: **New Mexico**

[10] This national park lies in southeastern New Mexico and features the Big Room, the third largest cave chamber in North America.

ANSWER: **Carlsbad Caverns** National Park

[10] This river which rises in western New Mexico flows into Arizona and eventually joins with the Colorado River at Yuma.

ANSWER: **Gila** River

<JD>

21. Bonus: It is the first of Hilbert's problems. For ten points each:

[10] Identify this unprovable statement, which posits that there is no set with cardinality greater than the set of integers and less than the set of reals.

ANSWER: continuum hypothesis (or CH)

[10] The continuum hypothesis was first put forth by this German mathematician, whose diagonal argument showed that the reals were uncountable. His namesake "set" consists of all base-3 decimals which contain only 0's and 2's.

ANSWER: Georg Ferdinand Ludwig Philipp Cantor

[10] The Cantor set contains this many points, and there are this many integers. Sets with this cardinality are denoted by the letter aleph with a numerical subscript, and this is often denoted by a sideways figure-eight.

ANSWER: infinity (or word forms, prompt on countable)

<MS>

22. Bonus: Answer the following about bananas in literature, for ten points each:

[10] Banana Yoshimoto wrote a novel called *[This] and Hard Luck*. Haruki Murakami wrote a novel about this type of Wonderland and the End of the World, and it names the genre of detective fiction practiced by Dashiell Hammett.

ANSWER: hard-boiled

[10] This author coined the term "banana republic" in *Cabbages and Kings*, but he is better known for his twist-ending short stories like "The Ransom of Red Chief" and "The Gift of the Magi."

ANSWER: O. Henry (or William Sydney Porter)

[10] This Guatemalan Nobel Laureate included *Strong Wind*, *The Green Pope*, and *The Eyes of the Interred* in his "Banana Trilogy." He also wrote *El Senor Presidente*.

ANSWER: Miguel Angel Asturias

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