

Valencia Fall Invitational

Round 5

Questions mostly by Chris Borglum, with math and science help from Jeremy Lee and Raj Dhuwalia

1) Catherine de Medici's plan to assassinate the Count of Coligny (call-in-ay) failed, so she chose August 24, 1572, as a good day to strike at her enemies in another manner. Because many of those enemies were in Paris, a Catholic stronghold, for the marriage of Henry of Navarre to Marguerite of Valois, it was easy to get loyal Catholics to attack Huegenot leaders. FTP what name is given to this slaughter of Huegenots on a saint's feast day?

A. **St. Bartholomew's Day Massacre**

2) The protagonist has safely brought home the ship Phaoron after its captain has died, so the ship's owner, Monsieur Morrell, makes him the new captain. Three jealous men conspire against him, however, leading to his imprisonment under false charges. When he escapes, he amasses a fortune and a noble title and uses it to get revenge. So goes, FTP, the plot of what novel featuring Edmond Dantes?

A. ***Count of Monte Cristo***

3) Planck deduced two effects governing its distribution: first, there would be a tendency to radiate more high-frequency light than low-frequency light; and second, since the probability of radiation decreased as the frequency went up, there would be a tendency to radiate less in the high-frequency range. FTP these effects govern the distribution of what "perfect radiation" from objects which absorb all incoming wavelengths?

A. **black body** radiation (acc. black bodies)

4) After graduating from Harvard he lost the family business through incompetence, he filled a vacancy in the Massachusetts legislative assembly in 1774. He wrote radical columns under the pseudonyms Candidus and Vindex, and he led colonial opposition to the Tea Act, culminating in the Boston Tea Party. Cousin to the second president, FTP name this namesake of a modern American micro-brew.

A. **Samuel Adams**

5) They usually have leaf veins in the form of a net, a ring of vascular bundles in the stem, and flower parts in multiples of four or five. They include many food plants, such as potatoes, peas, and beans, as well as ornamental flowers, like the rose and honeysuckle, and hardwood trees, including oaks and beeches. FTP name this type of flowering plant distinguished by having two seed leaves, unlike the monocot.

A. **dicot**

6) As the piano accompanist to the Hungarian violinist Edward Remenyi, this composer met many influential musicians, including Robert Schumann. Schumann promoted his work strongly, and after Schumann's death the young composer became close to Schumann's wife, Clara. Known for the *Academic Festival Overture*, FTP who is this composer of *A German Requiem* and third 'B' of classical music?

A. **Johannes Brahms**

7) For ten scrumptious math points, find the tenth term in the arithmetic sequence which begins 0, 3, 8, 15, 24

A. **99**

8) In the “Black River Country” of West Virginia, he was born full-sized, eight-feet tall, and signed on to work for the Chesapeake and Ohio Railroad after the Civil War. When Big Bend Mountain was in the way of the railroad, he led the team of men to tunnel through it. FTP name this “steel-drivin’ man” who defeated a steam-powered drill with his bare hands and a hammer.

A. **John Henry**

9) It is located 110 miles east-northeast of El Paso inside of Lincoln National Forest, just north of the Guadalupe mountains. The Park preserves a portion of the Permian-Era Capitan Fossil Reef and its Lechuguilla Cave is the deepest limestone cave in the U.S. Home also to the “Big Room” underground and famous for its colony of Mexican free-tailed bats, FTP this describes what New Mexico National Park?

A. **Carlsbad Caverns**

10) His 216 IQ explains why his favorite video game is “My Dinner with Andre.” Though he owns a Shar-Pei, he still shows up in one episode with a mechanical Scots Terrier. Although he was unsuccessful in lobbying to have 20 minutes added to the school day, he did win fourth grade class president over Bart. FTP who is this brainy character on The Simpsons?

A. **Martin Prince**

11) In 1950 a Dutch astronomer first inferred the existence of this astronomical entity, now named for him. It surrounds our planetary system and marks the furthest boundary of the sun’s physical and gravitational influence. Recently the source of Hale-Bopp, FTP what is this immense spherical region which generates comets, not rain?

A. **Oort Cloud**

12) The title character idolizes Steerforth, another student at Mr. Creakle’s school, to which he has been sent by his cruel stepfather Mr. Murdstone. After his mother’s death he works in a warehouse pasting labels on bottles while living with the poor but happy Micawber family. FTP this describes what Dickens novel whose protagonist finally finds happiness after helping Agnes Wickfield foil Uriah Heep?

A. **David Copperfield**

13) Mostly nocturnal, they are somewhat primitive primates including the avahi, sifaka and aye-aye, which have forward-directed lower front teeth and a claw on the second toe of the foot. Fossils of them are found in North America and Europe, though they remain in force only on the one island on which they haven’t faced much natural competition. FTP what are these creatures whose species include the dwarf, mouse, and ring-tailed, many of which still thrive in Madagascar?

A. **lemurs**

14) Born with the surname Walcott, he worked in the 1950s as a successful calypso singer, once recording a song titled "A White Man's Heaven is a Black Man's Hell." He took over Mosque Number Seven in Harlem after Malcolm X converted to Sunni Islam. FTP name this leader of the Nation of Islam and organizer of the Million Man March.

A. Louis **Farrakhan**

15) In the Inferno this creature guards the seventh circle of Hell and bites himself in rage on the approach of Dante and Vergil. Sometimes given the name Asterius, his mother, Pasiphae, was cursed by Poseidon to fall in love with a white bull he had given to her husband Minos. FTP this is what victim of Theseus, the inhabitant of the labyrinth?

A. **Minotaur**

16) Many of the paintings of his "Black Period" hang in the basement of the Prado, and include works like "The Witches' Sabbath." He became court painter to Charles IV in 1800 and was daring in portraying the family as they really looked rather than idealizing them. His *Clothed and Nude Majas* were judged obscene by the Inquisition in 1815. FTP who is this Spaniard best known for "The Third of May, 1808"?

A. Francisco de **Goya**

17) Born with the name Araminta in Maryland, a more "American" name was given by a later owner. In 1849 she made her way north, and she would have joined John Brown at Harper's Ferry, but became ill. She served Union forces as a cook and nurse in South Carolina and was said to have done some spying, as she knew how to move furtively and had many connections with slaves. FTP name this woman who led at least 300 slaves to freedom from 1840 through 1861.

A. Harriet **Tubman**

18) Like Wittgenstein, he was trained under Edmund Husserl, but took his teacher's phenomenology even further into existentialism. The central theme of his major work is that one's awareness of one's "being" is constantly masked by the routine trivia of daily life, but that angst builds from one's inability to connect with one's core being. FTP who is this author of *Being and Time*?

A. Martin **Heidegger**

19) The poem's speaker says, "They tell me you are wicked and I believe them, for I have seen your painted women . . . luring the farm boys." He continues, "I turn once more to those who sneer at this my city, and I give them the sneer back." Written in 1914, FTP what poem by Carl Sandburg describes the title city as "Hog butcher for the World" and "City of the Big Shoulders"?

A. "**Chicago**"

20) Written in a form similar to a catechism and first published in 1536, it included a plea to Francis I of France to halt his persecution of Protestants. It asserted the total sinfulness of man and denied that he has free will, an idea which leads directly to its central argument for predestination. FTP what is this short but hugely influential work by John Calvin?

A. *Institutes of the Christian Religion*

21) The name's the same. The 17th century dramatist wrote of an incestuous bloodbath in 'Tis Pity She's a Whore. The 20th century director saw his film "The Informer" take an Oscar in 1936. FTP what is the shared full name of this dramatist and the director of westerns like "My Darling Clementine" and "The Man Who Shot Liberty Valance"?

A. John Ford

Valencia Fall Invitational—Round 5 Boni

1) Give the common names of these ring-shaped organic compounds, FTP each:
The simplest aromatic compound, it has the formula C_6H_6

A. **Benzene**

This class of compounds has a hydroxyl group attached to an aromatic ring.

A. **Phenol** (prompt on hydroxybenzene)

This compound has a methyl group replaced one of the hydrogens of benzene.

A. **Toluene** (prompt on methylbenzene)

2) Identify these unique places in Florida FTPE.

This West Coast city has a large Greek population and is known for its sponge harvesting.

A. **Tarpon Springs**

This small town south of Tampa was the winter home of many carnival and circus performers and saw the mid-90s scandal of the murder of "Lobster Boy."

A. **Gibsonton** (acc. Gibtown)

This state park two miles northwest of Gainesville features a 120-foot deep sinkhole.

A. **Devil's Millhopper**

3) Answer these questions relating to a Russian surname FTPE.

This 18th-century field marshal was an intimate of Catherine the Great and was famous for his namesake villages, which were quickly built ahead of Catherine's carriage and subsequently dismantled.

A. Grigori **Potemkin**

The warship Potemkin mutinied in the Russian revolution of this year (five points if you're within two years).

A. **1905** (correct for five if between 1903-1907)

What famous Russian director made the classic film *Battleship Potemkin* in 1926.

A. Sergei **Eisenstein**

4) Identify these fictional detectives from descriptions FTPE.

Created by Earl Derr Biggers, this Chinese detective worked in Hawaii.

A. **Charlie Chan**

Created by Mickey Spillane, this two-fisted tough guy was played by Stacy Keach in a 1980s television series.

A. **Mike Hammer**

Created by Raymond Chandler, this private detective appeared in books like *Farewell, My Lovely* and *The Big Sleep*.

A. **Philip Marlowe**

5) Knock out these algebra questions for fifteen points each.

Find the sum of the x-intercepts of the equation $y=x^2+4x+6$

A. **-4**

Now find the product of the x-intercepts of the same equation ($y=x^2+4x+6$)

A. **6**

6) Identify these famous operas from characters and setting for ten points; if you need the composer, you'll only get five.

(10) Don Jose and Escamillo are characters; it takes place in Seville in 1820.

(5) Georges Bizet

A. **Carmen**

(10) Hedwidge, Jemmy and Gessler are characters; it's set in Switzerland in the 1300s.

(5) Giachimo Rossini

A. **William Tell** (acc. Guillaume Tell)

(10) Calaf and Ping, Pang, and Pong are characters; it's set in Peking at no particular time.

(5) Giacomo Puccini

A. **Turandot**

7) Name the following "tales" FTPE.

This one features Sydney Carton, Charles Darnay, and Madame Defarge.

A. A *Tale of Two Cities*

This one is an opera by Jacques Offenbach based on three stories by a 19th-century German writer.

A. *Tales of Hoffmann*

This collection of short stories by Poe includes "The Fall of the House of Usher." It also names an Alan Parsons Project album with Poe-themed songs.

A. *Tales of the Grotesque and Arabesque*

8) Identify these planets of our solar system from descriptions FTPE.

One of this planet's days is longer than its year. Also, it rotates east to west.

A. **Venus**

This is the fourth brightest object in our sky after the sun, moon, and Venus. It has 16 known satellites, some of which are Leda and Metis.

A. **Jupiter**

The mission to explore this planet was launched from Cape Canaveral in 1997, and it should arrive there in 2004. The mission was named for the Italian who described its best known feature.

A. **Saturn**

9) Name the psychologist from a term or terms s/he coined FTPE.

Synchronicity

A. Carl **Jung**

Inferiority complex

A. Alfred **Adler**

Object relations

A. Melanie **Klein**

10) Time to name those nutty pre-Socratic philosophers FTPE.

This owner of a lucrative olive pressing business believed that the ultimate substance was water.

A. **Thales**

Believing in constant flux, he said you can't step in the same river twice.

A. **Heraclitus**

This philosopher believed that there were four basic substance: earth, air, fire, and water.

A. **Empedocles**

11) Identify these scandals from American history FTPE.

Oakes Ames, a congressman from Massachusetts was formally censured by the House in 1869 for his involvement in this railroad construction scandal.

A. **Credit Mobilier**

Although the Elk Hills and Buena Vista Hills oil reserves were also illegally leased by Harding's interior secretary Albert Fall, the scandal is known by the name of this Wyoming oil reserve.

A. **Teapot Dome**

This group of distillers who had conspired to defraud the federal government of liquor taxes was investigated by Treasury Secretary Benjamin Bristow.

A. **Whiskey Ring**

12) It's time to name that 16th-century German artist FTPE.

This engraver is known for "The Four Horseman of the Apocalypse" and "Adam and Eve."

A. **Albrecht Durer**

This German moved to England where he executed his most famous work, "The Ambassadors."

A. **Hans Holbein**

His "Isenheim Altarpiece" features a nearly skeletal, lesion-ridden Christ on the cross.

A. **Matthias Grunewald**

13) Identify these S. E. Hinton works from descriptions of their film versions FTPE.

The most famous of her works, the film featured a pile of soon-to-be stars--Emilio Estevez, Tom Cruise, Ralph Macchio, Patrick Swayze, and Matt Dillon—in a war between the greasers and the socs (soshes).

A. ***The Outsiders***

Again featuring Matt Dillon, it was shot in black and white and included Mickey Rourke as a character fascinated with the title piscine.

A. ***Rumble Fish***

Again featuring Matt Dillon (jeez) as the title character, this film focused on the title character's scrapes with the law while trying to turn his life around.

A. ***Tex***

14) Identify these barely related people and things FTPE.

This legendary king of Athens threw himself into the sea when he saw the black sail mistakenly left up on the boat of his son Theseus.

A. **Aegeus**

Homer said this shield was made by Hephaestus for Zeus from goatskin and thunder.

A. **aegis**

This god of the winds kept the winds imprisoned in islands named for himself.

A. **Aeolus**

15) Name these important anthropologists FTPE.

Considered the father of American anthropology, he introduced the rigor of the scientific method to cultural studies, influencing many important students at Columbia.

A. Franz **Boas**

A student of Boas, this woman introduced the configuralist approach, which tried to identify a culture's central ethos. Her best-known work is probably *The Sword and the Chrysanthemum*.

A. Ruth **Benedict**

Another student of Boas, this woman's work *Tell My Horse* was an exposition of voodoo practices in the Caribbean. She may be better known for fiction writing, however.

A. Zora Neale **Hurston**

16) Identify these parts of the inner ear FTPE.

These canals mostly regulate our sense of balance.

A. **semicircular** canals

This snail-shaped spiral tunnel houses the Organ of Corti, the true organ of hearing.

A. **cochlea**

This passage connects the inner ear with the back of the throat.

A. **Eustachian** tube

17) Name these heavy-thinking Germans FTPE.

This philosopher opposed absolute idealists like Hegel and thought that the Will is a blind impulse, and for each individual, the universe is his own idea.

A. Arthur **Schopenhauer**

This man's Critique of Pure Reason argues that perception could give no knowledge of the thing-in-itself beyond experience of phenomena.

A. Immanuel **Kant**

Though perhaps better known for his scientific investigations into the properties of sound waves, this Positivist rejected a priori principles in science and reason.

A. Ernst **Mach**

18) Name these performers who may have sold their souls to the devil for fifteen points each.

By the age of nine he was wowing royal audiences in 1801; rumors abounded that the devil gave him his prowess on the violin.

A. Niccolò **Paganini**

This blues guitarist claimed to have traded Old Nick his soul for his ability to play guitar; his song "Hellhound on My Trail" reflects his fear of having to pay up.

A. **Robert Johnson**

19) You may be able to answer a question about plate tectonics, but see if you can name these plates on the Earth's surface FTPE.

This plate, which shares its name with an ancient people of South America, sits directly west of that continent.

A. **Nazca** plate

This small plate named for an explorer plunges below the North American plate in the Pacific Northwest, which has created mountain ranges and volcanoes there.

A. **Juan de Fuca** plate

This small plate sits between the Pacific and Eurasian plates and is named for a group of islands that rest on it.

A. **Philippine** plate

20) 30-20-10 Name the British monarch.

30) The son of Lord Darnley, he traced his lineage to the Tudors through Henry VII, his great, great grandfather.

20) His mother, Mary, was executed, and he himself called for the execution of Walter Raleigh to appease the Spanish.

10) He was King of Scotland for 58 years, and of England for 22, and he authorized the first widespread printing of the Bible.

A. **James I**