

1. First Kings 7:23 incorrectly states this value, while Professor John Frink purposely misstates its value to gain the attention of nearby scientists. Early civilizations had to estimate this irrational number, but early estimates were still accurate enough to give modern math students reason to celebrate on March 14th. For 10 points, identify this mathematical constant that also names a film directed by Darren Aronofsky.

Answer: **Pi**

2. This work ends with the words, "O humanity!" Turkey and Nippers share the title character's occupation while Ginger Nut does odd jobs and makes deliveries for the same employer, a Wall Street lawyer. It lends its name to a website offering free online access to many reputable reference works, including the American Heritage Dictionary. For 10 points, name this short story by Herman Melville that ends with the death by starvation of the copyist who often repeats the phrase, "I would prefer not to."

Answer: **"Bartleby the Scrivener"**

3. John Carpenter won it on November of 1999, as did Dan Harrington in May of 1995. It was \$45,000 less than the prize won by Mark Nakamoto for solving the mystery of *Push, Nevada*. In *Indecent Proposal*, it is offered to a man in exchange for sleeping with his wife. For 10 points, what is this amount of money, which Dr. Evil asks for from the modern day UN before being laughed at in *Austin Powers: International Man of Mystery*?

Answer: **One million dollars**

4. Charles D. Ross published a study of the impact this phenomenon had on such Civil War battles as Gaines' Mill, Perryville, and Shiloh. This phenomenon can be described as a region immediately behind an object placed in the path of a sound wave whose wavelength is much smaller than the object, in which the initial sound wave is cut off by the object and the sound intensity is determined by the diffraction and interference of sound waves bent around the obstacle. For 10 points, name this phenomenon, which is to sound what a mirage is to light.

Answer: **Acoustic Shadow**

5. Future Secretary of State Albert Gallatin later called his participation in this "my one political sin." Its first shots were fired on the South Park Township in Pennsylvania. George Washington responded to it by enforcing the Militia Law of 1792 and proceeded to build up an army of 15,000 men. FTP, identify this rebellion of 1794 that was brought about by a tax imposed by Secretary of the Treasury Alexander Hamilton on liquor and distilled drinks.

Answer: **Whiskey Rebellion**

6. Founder and editor of the literary reviews *Taller* and *El Hijo Prodigio*, he had finished his first book *Forest Moon*, at the age of 19. He was his country's ambassador to India from 1962-1968; his works written during that time included *East Slope*. His poem *The Sun Stone* was praised specifically as he was being presented the 1990 Nobel Prize in Literature. For 10 points, name this Mexican author of *The Labyrinth of Solitude*.

Answer: **Octavio Paz Lozano**

7. He spent his early career fighting against the invasion of his home country by Sweden. Following the defeat of the Swedish at the 1656 Battle of Warsaw, he became Standard Bearer to the Crown. After rising to the top ranks of the military, he managed a decisive victory against the Turks in the battle of Chocim. Tales of that victory, and the recent death of the unpopular king, allowed him to be elected king of the Polish-Lithuanian Commonwealth in 1674. For 10 points, identify this man who defeated the Ottoman Turks at the pivotal Battle of Vienna in 1683.

Answer: **Jan (or John) III Sobieski**

8. Originally discovered in 1895 by Dr. Hans Goldschmidt, this highly exothermic reaction occurs when aluminum reduces the oxide of another metal. While Iron (III) Oxide can be used, using Iron (II, III) Oxide is far more spectacular, owing to the extra mol of oxygen. One problem with this reaction; however, is the incredibly high temperature of ignition, which in many cases requires the use of magnesium strips to initiate. For 10 points, name this reaction commonly used in railroad welding, which is also the basis of many modern incendiaries.

Answer: **Thermite Reaction**

9. The Germans bought this territory from the Spanish, but in 1914 Japan occupied it and later received it as a League of Nations mandate. Since 1979 it has been independent, though the U.S. is still responsible for its defense. With over six hundred islands extending 1,800 miles across the Caroline Archipelago, it contains the island groups of Kosrae, Chuuk or Truk, Yap, and Pohnpei, the latter being the site of its capital, Kolonia. For 10 points, what is this island group nation with capital city at Palikir and site of the 1944 battle at the Truk Lagoon?

Answer: Federated States of **Micronesia**

10. It is called resumption in Australia. Supreme Court Justices Samuel Chase and Thurgood Marshall supported private citizens when the issue came before them. The most recent standard controlling its "public use" instance is a 2005 Supreme Court majority opinion authored by John Paul Stevens. In the opinion, he cited *Romer v. Evans* in stating that this kind of government action must be "independent and legitimate." For 10 points, *Kelo v. City of New London* concerned what government power to take private property with just compensation?

Answer: **Eminent Domain**

11. This man composed 24 symphonies. Among his many scientific accomplishments were his coining of the word "asteroid" and his discovery of two moons of Saturn. Before his death he helped to found the Astronomical Society of London, which became the Royal Astronomical Society. In 1781 he was made a fellow in the Royal Society and was awarded the Copley Medal for his greatest discovery. In 1800, he postulated the existence of infrared radiation via an experiment using sunlight, a thermometer, and a prism. For 10 points, name this astronomer who discovered Uranus.

Answer: Sir Frederick William **Herschel**

12. This 1984 novel was the first book in the Sprawl trilogy. It begins with Case, an unemployed, drug addicted computer hacker, being offered a cure to the condition that prevents him from jacking in, in exchange for his services to a man named Armitage. Along the way, he and Molly, the woman who recruited him, uncover a vast conspiracy orchestrated by an AI known as Wintermute that was created by the Tessier-Ashpool clan, a group which controls much of the wealth in Case's corporate world. Winner of the Hugo, Nebula, and Dick Awards and source of the term "cyberspace," FTP name this cyberpunk prequel to *Count Zero* by William Gibson.

Answer: **Neuromancer**

13. Its name roughly translated means Odin's steed, and it was from here that the great god hung for nine days, impaled on his own spear in the edda *Hávamál*. Underneath it existed three magical wellsprings which included Mímisbrunnr, the source of knowledge; Hvergelmir, the source of all rivers; and Urdarbrunnr, the well of fate. At Ragnarök, Surt will set it on fire, and thus cause the burning of the world. For 10 points, identify this great ash tended by the Norns that penetrated to all nine worlds of Norse mythology.

Answer: **Yggdrasil** (pronounced yug-dra-sill)

14. The core of this group's peasant base was brought into politics after the 1972 earthquake that wrecked the capital city. Their literacy efforts received commendation from UNESCO. In 1990, this group lost control of its country in multi-party elections. Its greatest victory was the toppling of the Somoza dynasty that had controlled Nicaragua from 1936 – 1979. For 10 points, name this populist movement led since 1984 by Daniel Ortega and whose enemies, the Contras, were backed by Ronald Reagan.

Answer: **Sandinista** National Liberation Front or **FSLN**

15. Due to a genetic disorder, his bones were unable to heal when he broke both of his thigh bones at an early age. As a result, he stood only 4 feet, 11 inches tall, but with a fully developed upper body. This drove him to alcoholism, which provided him a firsthand view of the bohemian lifestyle in his home of Paris, France. For 10 points, name this Post-Impressionist painter, famous for paintings of the night life at the Moulin Rouge.

Answer: Henri de **Toulouse-Lautrec**

16. Guests on this program have included Geena Davis, Morley Safer, Ashley Judd, Gordon Elliott, and a special visit by Martha Stewart. This show is produced by Dewey, Cheetem and Howe, which was founded by one of the hosts. Both hosts have earned degrees from MIT and broadcast at first from Boston, Massachusetts. Now they have a national audience every week. For 10 points, name this popular NPR show hosted by Tom and Ray Magliozzi.

Answer: **Car Talk**

17. At room temperature it can absorb approximately 900 times its own volume of hydrogen. It was thought to be an effective treatment for tuberculosis when mixed with chlorine, and is now used in airplane spark plugs, jewelry, and catalytic converters. It was. For 10 points, identify the transition metal that discoverer William Wollaston named after an asteroid discovered in 1802 and not after the Trojan statue of Athena, an element having atomic number 46.

Answer: **palladium**

18. Born in 1918 in Towson, Maryland, he was originally a Democrat, but became a Republican to fit in with his law partners. He eventually pleaded *nolo contendere* to charges of corruption stemming from his two-year stint from 1967 to 1969 as Governor of Maryland. His success as a Republican in a strongly Democratic state landed him a spot on the Presidential ticket in 1968. Known for his blustery, insulting style of media relations, FTP name the first Vice President under Richard Nixon.

Answer: **Spiro Agnew** or Spiros Anagnostopoulos

19. Ammonoids are often used as an Index Fossil to identify this geologic period. The insect orders Coleoptera and Diptera and the gymnosperms Cycad and Ginkgo first appeared in this period. At the end of this period the most massive extinction in paleontology occurred, with at least 70 percent of all species perishing. For 10 points, what is the last period in the Paleozoic Era, which lends its name to an oil-rich basin in Texas?

Answer: **Permian period**

20. He is buried in Ravenna, where he died at the court of Guido da Polenta. A member of the victorious cavalry at Campaldino, he was promised to his future bride Gemma Donati at the age of 12. He examined interaction with philosophy and science in *Convivio*, and idealistic love in *La Vita Nuova*. He was exiled from his hometown as a result of the conflicts between the White and Black factions of the Guelfs. FTP name the Florentine author of the Divine Comedy.

Answer: **Dante Alighieri**

21. Hammurabi once decreed it was to be rationed by a person's status in life. Everyday laborers were allotted 2 liters, civil servants received 3 liters, and administrators and high priests received 5 liters. Ben Franklin espoused that it was "proof that God loves us and wants us to be happy." It is produced through a five-stage production process of mashing, sparging, boiling, fermentation, and packaging. For 10 points, name this beverage that is constituted of water, a clarifying agent, yeast, barley and hops.

Answer: **beer**

22. In vivo, this readily soluble protein is an important transport protein in plasma, and it is also essential to maintaining osmotic pressure. In vitro, due to the inexpensive nature of production, it is often used as a molecular weight standard for SDS PAGE and Gel Exclusion Chromatography. Because it is highly immunogenic, it is an essential blocker of nonspecific binding of antibodies in molecular techniques such as Western Blotting and ELISA. For 10 points, identify the protein, isolated from cow's blood, and a homologue of the protein most commonly associated with egg whites.

Answer: **Bovine Serum Albumin** (accept Serum Albumin if before the word "production.")

23. Its sequel had James Remar in the same role played in the first movie by Christopher Lambert. The director of the second film went on to direct *Joe Dirt*, while the first director would go on to direct the first *Resident Evil* film. The license also led to a spin-off Saturday morning cartoon subtitled "Defenders of the Realm". For 10 points, identify this video game series that became popular because of its fatalities?

Answer: **Mortal Kombat**

1. For 10 points each, name the Henry Wadsworth Longfellow poem from lines.

Through all our history, to the last, In the hour of darkness and peril and need, The people will waken and listen to hear.

Answer: **“Paul Revere’s Ride”**

Onward through life he goes; Each morning sees some task begin, Each evening sees it close; Something attempted, something done, Has earned a night's repose.

Answer: **“The Village Blacksmith”**

Her rattling shrouds, all sheathed in ice, With the masts went by the board; Like a vessel of glass, she stove and sank, Ho! ho! the breakers roared!

Answer: **“The Wreck of the Hesperus”**

2. FTPE identify the following model organisms essential to the biological sciences.

In addition to being one of the workhorses of modern molecular biology, this Gram-negative intestinal bacterium is also the principal model for the study of bacterial conjugation and the first model used in studies of transduction.

Answer: **Escherichia coli or E. coli**

Thomas Hunt Morgan used this fruit fly for his studies of heredity, and their polytene chromosomes offered scientists the first real view of chromosomal mutations.

Answer: **Drosophilla melanogaster or D. melanogaster**

Also known as brewer's yeast, this is perhaps the best studied of the eukaryotic organisms. It has been used to study cell budding, recombination via ascospores, and eukaryotic cell structure in general.

Answer: **Saccharomyces cerevisiae or S. cerevisiae**

3. For 10 points each, answer the following about U.S. foreign relations of the 19th century.

This term coined by John O’Sullivan expressed the ideology that American policy of Westward expansionism in the 1840's and later the 1890's was divine will.

Answer: **Manifest Destiny**

This 1842 treaty resolved the border dispute which was the cause for the Aroostook War and set the boundaries between the United States and Canada, up to the Rocky Mountains.

Answer: **Webster-Ashburton Treaty**

This 1891 incident occurred when James Blaine ordered American intervention to stop an unfavorable coup in Chile.

Despite the capture of a rebel ship, he failed to stop the coup, and two drunken sailors on leave were killed. Following an ultimatum by President Benjamin Harrison, the Chilean government paid \$75,000 in reparations.

Answer: **Baltimore Crisis or U.S.S. Baltimore Affair**

4. Answer these questions about King Arthur and the quest for the Holy Grail for the stated number of points. And, nee, we’re not talking about Monty Python version.

(5) He was selected as the purest of nights to quest for the grail; and became one of the three discoverers of the Grail.

Answer: **Galahad**

(10) The son of Pellinore, he is also one of the Grail’s founders. In his later years he became king of Carbonek on the island of Sarras.

Answer: **Percival**

(15) This cousin of Lancelot is the third of the Grail’s discoverers. He killed Dorin, son of Claudas.

Answer: **Bors the Younger (the authors said to prompt on Bors, but we’ll cut some slack here)**

5. We just can’t get enough of Russian composers. Name these from works for 10 points each.

*Petrushka, The Rake’s Progress, The Soldier’s Tale*

Answer: Igor **Stravinsky**

*The Bells, Rhapsody on a Theme of Paganini*

Answer: Sergei **Rachmaninoff**

*The Nose, Lady Macbeth of Mtsensk*

Answer: Dmitri **Shostakovich**

6. (UT) FFPE, given the most populous county or parish, each with a population over 1 million, name the state:

A. Cook

Answer: Illinois

B. Middlesex

Answer: Massachusetts

C. Clark

Answer: Nevada

D. Wayne

Answer: Michigan

E. Hennepin

Answer: Minnesota

F. Harris

Answer: Texas

7. Name these laws of thermodynamics for 10 points each.

Energy has a tendency to increase its entropy rather than decrease it.

Answer: **Second** Law of Thermodynamics

When two systems are put in contact with each other, there will be a net exchange of energy between them unless they are in thermal equilibrium.

Answer: **Zeroth** Law of Thermodynamics

Energy cannot be created or destroyed; the amount energy lost in a reaction cannot be any greater than the amount of energy gained.

Answer: **First** Law of Thermodynamics

8. (VT/CS) 5-10-20-30, identify these Aaron Sorkin projects:

This show details the travails of the fictional U.S. President Josiah Bartlett and his staff. It starred Martin Sheen, John Spencer, Rob Lowe, Bradley Whitford, and others.

Answer: The **West Wing**

Premiering on NBC on September 18 of this year, it centers on a fictional sketch comedy show quite similar to Saturday Night Live. Among others, it stars Matthew Perry, Bradley Whitford, D.L. Hughley, and Amanda Peet.

Answer: **Studio 60 on the Sunset Strip**

Sorkin's previous TV-behind-the-scenes series, it centered on a fictional sports show not unlike ESPN's Sportscenter. Stars included Felicity Huffman, Robert Guillaume, Peter Krause, and Josh Charles.

Answer: **Sports Night**

Sorkin's previous White-House-behind-the-scenes effort was this 1995 film, which also featured Martin Sheen but gave the Chief Executive role to Michael Douglas opposite Annette Bening.

Answer: The **American President**

9. About 90,000 men and women broke through a siege in Jiangxi province; less than half of them made it all the way to Yan'an. FTPE:

Give the popular name in English for this trek by China's Red Army in 1934-35.

Answer: the **Long March**.

From what political party-slash-army headed by Chiang Kai-Shek was the Chinese Red Army fleeing?

Answer: the **Kuomintang**

This future Premier, the administrative counterbalance to Mao Zedong, was among those who joined the Long March.

Answer: Zhou Enlai

10. For 10 points each, name the French playwrights from clues.

He penned *Le Cid* and *Polyeucte*, and his brother was also a writer.

Answer: Pierre **Corneille**

His plays often had classical or religious themes. Two of his plays are *Phedre* and *Athalie*.

Answer: Jean **Racine**

He wrote the plays *Paméla Giraud* and *Cromwell*, but is better known for his *Human Comedy*.

Answer: Honore de **Balzac**

11. Name these equations from standard forms or examples for 10 points each.

$Ax^2 + Bx + C = 0$ , when  $A \neq 0$ .

Answer: **Quadratic** equation

$F = M \frac{d^2x}{dt^2}$  with respect to time. Laplace's equation is another famous example.

Answer: **Differential** equations

$2X = Y$ ,  $AX + BY = C$ .

Answer: **Indeterminate** equations

12. (CS) FTPE name the authors of these Gothic novels:

(a) *The Mysteries of Udolpho*

Answer: Anne **Radcliffe**

(b) *The Castle of Otranto*

Answer: Horace **Walpole**

(c) *The Monk*

Answer: Matthew Gregory **Lewis**

13. (CS) FTPE name the 20th century artist: of the following paintings:

(a) Agrarian Leader Zapata

Answer: Diego **Rivera**

(b) Little Pleasures #174

Answer: Wassily **Kandinsky**

(c) Gala and the Angelus of Millet Immediately Preceding the Arrival of the Conic Anamorphoses

Answer: Salvador **Dali**

14. Name these George W. Bush cabinet members from clues concerning their past careers for 10 points, or for 5 points if you need their current position.

(10) He held his current position under Gerald Ford, and has also served in the House of Representatives and as Ambassador to NATO.

(5) Secretary of Defense

Answer: Donald **Rumsfeld**

(10) This San Antonio native was appointed by Bush to the Texas Supreme Court, and was also named White House Counsel in Bush's first term.

(5) Attorney General

Answer: Alberto **Gonzales**

(10) He was mayor of Lincoln, Nebraska from 1991-1998, after which he became Nebraska's governor, a position he held until appointed by Bush in 2004.

(5) Secretary of Agriculture

Answer: Mike **Johanns**

15. For 10 points name the type of galaxies from a description.

These galaxies have bands of stars across the middle as opposed to a central bulge. Their motion is governed by the rotation of the galaxy.

Answer: **Barred Spiral** Galaxies

These types of galaxies are characterized by lots of random stellar motion. They have little interstellar materials in them.

Answer: **Elliptical** Galaxies

These galaxies make up a quarter of all known galaxies and have little to no structure

Answer: **Irregular** Galaxies

16. FTPE name the musical artist who originally performed the song that formed the basis of these Weird Al parodies.

White and Nerdy

Answer: **Chamillionaire** (Ridin')

Amish Paradise

Answer: **Coolio** (Gangsta's Paradise)

The Saga Begins

Answer: Don **McLean** (American Pie)

17. For 10 points, identify the nation whose wars for independence featured these leaders. You will receive 5 points if you need the nation from whom the nation in question sought independence.

(10) Michael Collins

(5) United Kingdom

Answer: **Ireland**

(10) Miguel Hidalgo

(5) Spain

Answer: **Mexico**

(10) John Capodistria

(5) the Ottoman Empire

Answer: **Greece**

18. Identify the following chemical assays from descriptions of their use, FTPE:

While not a formally named test *per se*, adding this reagent to a solution will turn it a deep purple if it contains starch.

Answer: **Potassium Iodide or Iodine**

This assay uses a diamine-silver complex, prepared in situ, to test for the presence of aldehydes in a sample. In their presence, a silver mirror will form on the walls of the test tube.

Answer: **Tollen's Test**

This test, often employed in crime scene investigation, involves the use of hydrogen peroxide and phenolphthalein to test for the presence of blood. Hemoglobin in the blood catalyzes the removal of hydrogens from the phenolphthalein causing it to turn pink.

Answer: **Kastle-Meyer Test**

19. Identify these Eastern literary epics for 10 points each.

This Sanskrit epic tells the tales of the hero also identified as the seventh avatar of Vishnu.

Answer: **Ramayana**

This semi-historical epic, the magnum opus of a poet known as Ferdowsi and the national epic of Iran, details the Zoroastrian creation story, and the early history of Iran, up to its conquest by the Arabs.

Answer: **Shahnameh**

This Japanese historical epic deals with the struggle between the Taira and Minamoto clans for control of Japan.

Answer: **The Tale of the Heike** (accept **Heike Monogatari**)

20. (CS) For 10 pts. each, name these religious minorities within the Arab world: (a) Concentrated in southern Syria and Lebanon, the members of this secretive Muslim sect believe the 11th century Egyptian caliph El Hakim Biamr Allah's claims that he was the final reincarnation of God. They take their name from El Hakim's most successful missionary.

Answer: **Druze**

(b) Because the Byzantines were persecuting them for their Monophysite doctrine, the ancestors of these Egyptian Christians assisted the Arabs in their Islamic invasion of Egypt in the 640's. Oops.

Answer: **Copts**

(c) About 30,000 of these are believed to survive in the border area of Iraq, Iran, & Turkey. They believe in one God who is manifested in 6 godly beings -- the sun, Satan, Jesus, Melak Salem, Yazid, and their 11th century founder, Shaikh Adi.

Answer: **Yazidis**

21. For the stated number of points, identify the birthstone that forms from each of these minerals.

(5) Either of the birthstones formed from corundum.

Answer: **ruby or sapphire**

(5) Either of the birthstones formed from beryl.

Answer: **aquamarine or emerald**

(10) quartz

Answer: **amethyst**

(10) olivine

Answer: **peridot**

22. 30-20-10, name the Congressman.

(30) His son, Joshua, is a lobbyist for Podesta Mattoon. Despite the controversy caused by this, Joshua claims to never lobby his father or his associates.

(20) Controversies have followed this congressman in recent years as he tries to retain his seat against former United States Navy intelligence officer John Laesch.

(10) He surpassed Joseph Cannon as the longest-serving Republican Speaker of the House in history on June 1, 2006.

Answer: Dennis **Hastert**