# Technophobia VIII <br> Round Seven 

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## 1 HMC Tossups, Round Seven

1. During his retirement at a monastery in Avila he was so afraid of being poisoned that he supposedly kept a unicorn's horn handy as an antidote. His early career as a Dominican monk was spent near his home in Vallodolid and soon after his promotion to prior of Santa Cruz monastery he became confessor to Queen Isabella of Castille. He later staged the sham LaGuardia trial of eight converted Jews who were accused of crucifying a Christian child and burned at the stake, which encouraged the expulsion of the Jews from Spain. For ten points, name this First Grand Inquisitor.
Answer: Tomas de Torquemada
2. Five out of this artist's eight sons became painters and his brother, Dirk, was a skilled painter of interior scenes. He was among the first to use alla prima, the technique of painting directly on a canvas. Spending most of his later years in financial troubles his compositions became more dour, as evidenced by The Women Regents of the Old Men's Home at Haarlem. He was a master of group portraiture and with instinctive and rapid brushstrokes was adept at capturing momentary facial expressions. For ten points, name this Dutch portraitist of The Archers of Saint Hadrian and The Laughing Cavalier.
Answer: Franz Hals
3. He currently runs a consulting firm that specializes in helping companies dealing with China. A longtime Harvard professor his books include Nuclear Weapons and Foreign Policy, and more recently, Does American Need a Foreign Policy?. He was instrumental in settling the Yom Kippur War and in opening China to the U.S. but has been criticized, most notably by Christopher Hitchens, who wants him tried as a war criminal, for his complicity in Pinochet's coup in Chile and the indiscriminate bombing of Cambodia. FTP identify this winner of the 1973 Noble Peace Prize who served as Ford's and Nixon's Secretary of State.

## Answer: Henry Kissinger

4. To the south west of this city lies a Sarcee Indian Reserve and Nose Hill Park takes up much of its Northern Section. Gilmore Reservoir is located in the south and the Elbow and Bow rivers converge near its center. Founded in 1875 and originally named Fort Brisbois, it nearly doubled in size during the late 1970s as a result of an oil boom. It is home to the world-famous rodeo event The Stampedeand it played host to the 1988 Winter Olympics. For ten points, identify this largest city in Alberta, located 300 kilometers south of Edmonton.
Answer: Calgary
5. A native of Dubuque, Iowa, he was the subject of the Bob Woodward biography Frazzled. He had a brief stay in the Betty Ford clinic after joining the Rajnesshee cult and used a relationship with Jeane Kirkpatatrick to sell secrets to Russia. His occupations included televangelist, lead-singer for the band Deathtongue and two-time Presidential candidate for the Meadow Party. He also dated the Clinton's cat, Socks, and had Donald Trump's brain transplanted into his body. FTP identify this character whose most prevalent words are Oop-Ack, the best-friend of Opus and the unkempt feline star of Berke Breathed's Bloom County.

## Answer: Bill the Cat or Bill D. Cat

It was the dominant ideology in Latin American politics in the late $19^{\text {th }}$ century best exemplified by Porfirio Diaz's Mexico. Among the thinkers associated with this movement were Jose Limantour, Emil Littre, Hippolyte Taine and Claude Bernard. It had a religious dimension, the Religion of Humanity, which worshipped the lives of Great Men and it posited a three stage historical development beginning with the Theological moving to the Metaphysical and culminating with its namesake stage. Science and especially sociology were exalted as the means to further progress. For ten points, identify this philosophical doctrine founded by Auguste Compte.

## Answer: Positivism

6. The shortest solution, known as God's Algorithm, has been proven to require no more than 22 moves in theory, but the shortest known prescriptive algorithm, developed by Morwen Thistlethwaite, requires as many as 50 moves. Serious solvers record their solutions using David Singmaster's standard notation consisting of the letters F, B, U, D, L, and R. In some sense a 3-D version of the 15 -puzzle for ten points, name this six-sided toy, the invention of a Hungarian architect.

## Answer: Rubik's Cube

7. His epithets included "Poised," "Sober," and "Clear-Headed" which is similar to the way he is depicted as a man "centered in the sphere of common duties," who, by "slow prudence" will make mild/ A rugged people, by a Victorian poet. He aids the seer Theoclymenus, befriends Pisastratus, the son of Nestor, and after a failed ambush attempt is called a clever little schemer by Antinuous. He received a mixing bowl from Menelaus and is immediately recognized by Helen during a trip in which he is guided by Athena, disguised as Mentor. For ten points, name this hero whose name means Far Battle, the son of Odysseus.
Answer: Telemachus
8. First given its name in an 1822 paper by William Conybeare and William Phillips, this period saw the replacement of lobe-fin fish with sharks as well as the development of the amniote egg which led to the appearance of reptiles. The southern Appalachians were formed with the collision of Euramerica and Gondwanaland and the lands were overgrown with trees and swamps producing the largest abundance of oxygen ever in the atmosphere. In North America it is divided into the Pennsylvanian and Mississippian periods. For ten points, identify this geologic Period occurring 260-290 million years ago between the Devonian and Permian and named for its rich deposits of coal.

## Answer: Carboniferous Period

9. His lesser-known plays include The Family Reunion and The Cocktail Party, and his unfinished poems include "Coriolan" and "Sweeny Agonistes" "Burnt Norton," "East Coker," "The Dry Salvages," and "Little Gidding" compose his "Four Quartets." For ten points, who is this Anglo-American poet, who is better known for his play Murder in the Cathedral and the poems "The Hollow Men" and "The Waste Land"?
Answer: T.S. Eliot
10. He has a license to love; in fact, he's loved in seven languages. Although his heart is cold, his eyes are like angels. Right now, this lover boy is living the diamond life, laughing with another girl and playing with another heart. This sort of shadowboxing is placing high stakes, and heaven help him when he falls. He moves from coast to coast, L.A. to Chicago, and across the north and south to Key Largo. No need to ask, he's, for ten points, what nameless titular character from a 1984 Sade [shah-DAY]
mega-hit?
Answer: Smooth Operator
11. Encompassing 42,018 square kilometers, it is the world's thirty-first largest island. Its major exports are coal, tea, tobacco, rice, copper, sweet potatoes, zinc and raw silk, and it is particularly known for its fine porcelain ware. Bordered on the east by the Bungo Strait, it is home to the Chikugo River, as well as the active Aso-san volcano and the oldest coal field in Japan. Politically, it includes portions of the prefectures of Kagoshima, Kumamoto, Saga, Oita, Miyazaki, Fukuoka, and Nagasaki. For ten points, name this southernmost of the four major Japanese islands.
Answer: Kyushu
12. In Chapter 24 of Smollet's Roderick Random, Mr. Thomson saves the title character from this practice while James Fenimore Cooper rails against it in Afloat and Ashore. Although not officially abolished it has not been practiced much since it reached its height during the Napoleonic Wars. The Nicholson Non-Importation Act and the Embargo Act of 1807 were U.S. retaliations against its use on American citizens; the most famous incident of which occurred after the Leopard fired on the Chesapeake. FTP identify this action, one of the causes of the War of 1812 , the forcible recruitment a person into military service.
Answer: Impressment (accept Press Gangs or Pressment, prompt on "Shanghai")
13. An exhibition of wood sculptures by Gauguin helped build this artist's reputation, since his early training in his native country had been in wood sculpture. A pioneer of modernism, the extreme abstraction of his sculptures is sometimes misunderstood: in 1927, US Customs imposed a $40 \%$ import tax on one of his works because they judged it to be propeller blade instead of a work of art. FTP name this Romanian sculptor of The Kiss, The Sleeping Muse and the controversial Bird in Space.
Answer: Constantin Brancusi (bran-KOO-see)
14. A fan of Sherlock Holmes, he shares a profession with that fictional detective's creator, Sir Arthur Conan Doyle. He would give up medicine, however, for a career in politics, making a name for himself as a radical with a 1970 book which claimed that his countrymen, unlike their Chinese ?migr? counterparts in his home country, were lazy. He was banned from his party, but made a comeback and in 1981 became Prime Minister, a position he has held ever since. For ten points, name this critic of George Soros and international currency speculation, the retiring Prime Minister of Malaysia who recently claimed that "Jews rule the world by proxy."
Answer: Mahathir Mohamed
15. Actually consisting of three smaller engagements, this battle remains the largest naval engagement by tonnage in history. The Japanese plan of action called for a fleet of empty Japanese carriers under Admiral Ozawa to act as a decoy to lure American carriers away from General Macarthur's landing force. Although the aggressive Admiral Halsey did indeed chase the decoy, heroic fighting by the escort carrier fleet of Admiral Clifton Sprague nevertheless held off the powerful Japanese battleships of Vice Admiral Kurita, ensuring the destruction of the Japanese navy. For ten points, name the battle that allowed the U.S. to take the Philippines.

## Answer: Battle of Leyte Gulf

16. It has virtually no fossil record although eggs from members of this phylum have often been found in Egyptian mummies and fossilized sloth dung. Along with rotifers and annelids it is often placed in the clade Lophotrochazoa although many argue that it is polyphyletic. Its subdivisions include Planarians and Monegenea and all members respire by diffusion. They are both triploblastic and bilaterally symmetric. The most famous members of the classification are Trematoda and Cestoda, better known as flukes and tapeworms. For ten points, identify this phylum commonly known as flatworms.
Answer: Platyhelminthes (prompt on flatworm)
17. This 1979 movie captured the Academy Award for Best Visual Effects, thanks to the bizarre, surrealistic designs of Swiss artist H. R. Giger. Ellen, the main character, is much more recognizable when referred to by her last name, which is one letter away from the first name of the film's director. The film's title character is slated to appear in a new 2004 sequel to battle the title character of an early Arnold Schwarzenegger vehicle. The movie introduced the film-going public to terms like "face-hugger" and "xenomorph." For ten points, name this sci-fi fear-jerker that returned to theaters on Wednesday, October 29.
Answer: Alien (do not accept "Aliens," "Alien 3," "Alien: Resurrection," or "Alien vs Predator")
18. It leaves an extremely clean signature and because its production rate has been measured in protonproton collisions Olivier Drapier believes that a suppression in its production could indicate the presence of Quark-Gluon Plasma. It was detected at Brookhaven by Samuel Ting when, after bombardment of a stationary target, a peak in electron and positron production was detected at an energy of 3.1 billion electron volts. On the same day in 1974, however, another group led by Burton Richter detected it and gave it a different name leading to its double identification. For ten points, identify this meson composed of a charm quark and charm antiquark.
Answer: J/psi particle or I particle or psi particle
19. Like Alexander the Great, he seeks to conquer the whole world. However, his conquests are of a different nature; they include a soon-to-be nun, the fiancée of a frustrated peasant, and a simple peasant girl. For ten points, name this infamous lover who is said to be so indiscriminant that he would go after "you, your dog, and your cat," the protagonist of a play by Molière.
Answer: Dom Juan OR Don Juan
20. Although he served as Speaker of the House for longer than any other man in the 19th century, his greatest ambition was to become president. After three failed attempts, however, this Whig famously remarked, "I would rather be right than President." His greatest rival was Andrew Jackson, who wrongly accused him of entering into a "corrupt bargain" in the election of 1824, after which he became Secretary of State. For ten points, name this architect of both the Missouri Compromise and the Compromise of 1850 .
Answer: Henry Clay
21. This period is noted for massive grave mounds called Kofun which gives the period its alternate name. One of its first recorded rulers was Queen Himiko and it profited greatly from its friendly relationship with the Kingdom of Paekche on the Korean peninsula from which it imported Buddhism and Confucianism. Its later stages are often divided into the Asuka period in which Prince Shotoku promulgated his Seventeen Article Constitution and The Hakuho period which began with the overthrow of the Soga and the implementation of the Taika Reforms in 645 C.E. For ten points, identify this period preceding the Nara which saw the first attempt to unify Japan.
Answer: Yamato
Asuka 552-645 and Hakuho 645-719

## 2 HMC Bonuses, Round Seven

1. Identify the group of stars on the H-R diagram from descriptions for ten points each.
(a) The region containing $85 \%$ of all stars goes diagonally across the chart from hot and luminous to cool and dim. Stars in this evolutionary stage are consuming hydrogen in their core.
Answer: Main Sequence
(b) This group is located on the lower left of the diagram. Stars categorized as this type are hot and dim and thus also very small and dense.
Answer: White dwarf
(c) This subsection of the diagram most prominent in Globular clusters contains stars which are burning helium in their cores and hydrogen in their shells. Their name derives from the fact that they evolve across the diagram at nearly constant luminosities.
Answer: Horizontal Branch Stars
2. Identify the figures involved in the tumultuous year of 1848 .
(a) 1848 revolutions were a reaction to this conservative Austrian architect of the Carlsbad Decrees and the balance of power following the Congress of Vienna.
Answer: Clemens von Metternich
(b) This revolutionary led Hungary's independence movement from the Austrian Empire. After it was suppressed with Russian help he fled to Turkey and later died in Italy.
Answer: Louis Kossuth or Lajos Kossuth
(c) This poet and novelist was briefly head of France's provisional government following the overthrow of Louis Phillipe. His moderation and idealism did not suit actual politics and he retired after being crushed in the December presidential election by soon-to-be Emperor Napoleon III.
Answer: Alphonse Marie Louis de Lamartine
3. Match the following ethnographies with their authors for ten points each.
(a) Deep Play: Notes on the Balinese Cockfight

Answer: Clifford Geertz
(b) Number Our Days

Answer: Barbara Myerhoff
(c) The House of Lim

Answer: Margery Wolf
4. Identify these Argentine leaders from clues for ten points each.
(a) This caudillo was the virtual dictator of Argentina from 1829-1852 and his regime of terror sent such intellectuals as Bartolome Mitre into exile. He was ousted from power after being defeated by Justo Urquiza at Monte Caseros.

## Answer: Juan Manuel de Rosas

(b) One of the intellectuals exiled by Rosas this author of Facundo, a Study of Caudillismo who was also president from 1868-74. His term saw great improvements in education and an end to the War of the Triple Alliance.
Answer: Domingo Sarmiento
(c) He was president from 1946-55 and again from 1973 until his death in office a year later. His nationalistic and populist ideology was primarily supported by the working class who adored his second wife.

## Answer: Juan Peron

5. 30-20-10 Name the activity.

30 Tactics used in this activity include the Porskoff Ploy, the Hawkshead Attacking Formation and the Wronski Defensive Feint.
20 Fourteen people are needed to play it. One unusual consequence of its rules is that flawless defensive performances by both teams would result in a final score of 150 to nothing.
10 A team in this sport consists of one goalkeeper, two beaters, three chasers, and a seeker, whose sole job is to find the golden snitch.
Answer: Quidditch
6. Know your Norse Apocalypse: At Ragnarok, predestined pairs of combatants will fight for the fate of the world.
(a) For five points each, name both the god who will be swallowed by Fenrir, and the god who will eventually kill the giant wolf.
Answer: Odin (accept Woden, prompt on Allfather) AND Vidar (prompt on Odin's son)
(b) For five points each, name Thor's hammer and the creature he will kill with it, even as he dies from its poisonous venom.
Answer: Mjollnir (me-YOL-neer) AND Jormungand (prompt on Midgard Serpent OR World Serpent)
(c) Heimdall will blow his horn, announcing to the gods that Ragnarok has begun. For ten points, who will kill him?
Answer: Loki
7. Combine names of English Renaissance plays with scary movies to get the stories described for ten points each.
(a) In two parts, this is Shakespeare's tale of a King of the House of Lancaster who sees dead people. Walking around like regular people. They don't know they're dead.
Answer: Henry the Sixth Sense
(b) In this work by George Romero, Viola loves Count Orsino, who loves Olivia. But Olivia has fallen in love with Viola in the disguise of the page Cesario. Sadly, they are all eaten by zombies.
Answer: Twelfth Night of the Living Dead
(c) Christopher Marlowe immortalizes the mass murders of French Huguenots in France's capital. He then decides to add some scenes in the Lone Star State and kill the Huguenots with very modern equipment.
Answer: The Texas Chainsaw Massacre at Paris
8. What do you call a drummer who's been dumped by his girlfriend? Homeless. Drummers are fun to mock, aren't they? Unfortunately, this is a literature bonus, so here's a semi-related question on that masterwork of German fiction, The Tin Drum.
(a) For five points, name the author of The Tin Drum, the winner of the 1999 Nobel Prize for Literature.
Answer: Günter Grass
(b) For ten, The Tin Drum is part of what Günter Grass trilogy named for his home town? Answer: The Danzig Trilogy
(c) Five for one and fifteen for two, name the other two books in the Danzig Trilogy. Answer: Cat and Mouse and Dog Years
Katz und Maus and Hundjahre
9. Identify the following Gilbert and Sullivan operettas from the subtitle.
(a) "The King of Barataria"

Answer: The Gondoliers
(b) "The Slave of Duty"

Answer: Pirates of Penzance
(c) "The Lass that Loved a Sailor"

Answer: H.M.S. Pinafore
10. Some artists paint nature, and some artists make art out of nature. for ten points each, identify the following associated with unusually natural art.
(a) This 1970 structure by Robert Smithson consists of a 15 -foot-wide coil of basalt and earth extending 1500 feet into Utah's Great Salt Lake.
Answer: Spiral Jetty
(b) This Scottish artist creates works entirely from natural objects, including rocks, leaves, icicles, moss, and sheep's wool. His process was recently recorded in the documentary Rivers and Tides. Answer: Andy Goldsworthy
(c) Smithson and Goldsworthy, among others, belong to this American movement, an offshoot of Land Art. It flourished in the 1960s and 70s and centers around the direct manipulation of soil and terrain.
Answer: Earthworks
11. Given the model number and combat role, give the more famous American codename for the Japanese WWII fighter that played a prominent role in the Pearl Harbor raid.
(a) Aichi D3A, dive bomber Answer: Val
(b) Nakajima B5N, torpedo bomber

Answer: Kate
(c) Mitsubishi A6M, air superiority fighter

Answer: Zero (accept Zeke)
12. Identify the following discrete distributions used in statistics for ten points each.
(a) This distribution can be used to model the number of expected number of occurrences of an event in a given time period. It is defined by a single parameter, lambda.
Answer: The Poisson distribution
(b) In an experiment consisting of an indefinite number of independent Bernoulli trials, the variable representing the number of trials until the first success will follow this distribution.
Answer: The geometric distribution
(c) In an experiment consisting of a fixed number of Bernoulli trials, this distribution models the total number of successes.
Answer: the binomial distribution
(b) A friend of Bakunin's, this Frenchman probably became a socialist under the tutelage of Charles Fourier. He is most famous for his phrase "Property is theft."
Answer: Pierre-Joseph Proudhon
(c) The premiere anarchist thinker of $19^{\text {th }}$-century America, he translated much of Proudhon's work into English and advocated a utopian system of free thought and free love in order to produce philosophical anarchism.
Answer: Benjamin Tucker
13. Answer some questions about a poem for ten points each.
(a) What Wilfred Owen work begins, "Bent double like old beggars under sacks?"

Answer: Dulce et Decorum Est
(b) What two-word numerical phrase in the poem refers by caliber to the explosive shells that were standard ammunition for German artillery?
Answer: five-nines
(c) What is the last line of the poem, which completes the quotation from Horace of "the old lie: dulce et decorum est?"
Answer: pro patria mori
Don't accept "to die for one's country"
14. Identify these mythic races from various European mythologies for ten points each.
(a) A group of nature and fertility gods who initially opposed the Aesir, this race of Norse dieties is represented in the Norse pantheon by the god Njord and his children, Frey and Freya.

## Answer: Vanir

(b) The predecessors and competitors of the gods in Greek myth, these dieties were the twelve children of Uranus and Gaia.
Answer: Titans
(c) Sworn enemies of the Tuatha de Danann in Irish myth, this race of demonic giants occupied Ireland in ancient times and ruled by their one-eyed king Balor.
Answer: Fomorians
15. Answer some questions about thermodynamics for the stated number of points.
(a) Depending on whether a particle has integer or half-integer spin, it will obey one of two types of statistics, each named after a pair of scientists. Identify these statistics for 5 points each.

## Answer: Bose-Einstein and Fermi-Dirac

(b) The two types of statistics converge in the classical limit, where the difference between the energy and this quantity is much greater than the temperature.
Answer: chemical potential
Do not accept "Fermi Energy" which is approximately equal to chemical potential only when the temperature is much less than the characteristic temperature
(c) The chemical potential is defined as the derivative of the Helmholtz variety of this quantity with respect to the number of particles at constant temperature.
Answer: free energy
16. Answer some questions about the short rule of James II of England for ten points each.
(a) In 1688, James II was formally ousted by parliament and replaced with William of Orange and his daughter Mary in this event, so named for the lack of bloodshed it entailed.
Answer: Glorious Revolution
(b) In the same year that he was crowned, James II had to fend off an attempted coup by this halfbrother, the illegitimate son of Charles II and his mistress Lucy Walter. Fortunately for the king, this man's drive for the throne failed after he was defeated at Sedgemore and he was executed.
Answer: James Scott, Duke of Monmouth
(c) Following Monmouth's defeat, this series of court sessions was held to try Monmouth's coconspirators. Although many had pled guilty under a promise of leniency, Chief Justice George Jeffries had many of them executed anyway, giving these trials this collective name.

## Answer: Bloody Assizes

17. The Bush administration has recently been imbrgoiled in a high-profile scandal. Answer some questions about it for ten points each.
(a) Someone in the administration is alleged to have revealed the identity of this CIA agent to columnist Robert Novak.

## Answer: Valerie Plame

(b) He claims that the revelation of his wife's identity was in revenge for his editorial which discredited the claims made by Bush in his State of the Union speech.
Answer: James Wilson
(c) Wilson believes that mastermind of Republican strategy leaked Plame's name to the press. Answer: Karl Rove
18. Answer these questions regarding the Battle of Bunker Hill FTPE.
(a) Most, if not all, of the battle fought on this nearby hill, fortified by 1200 Americans. Answer: Breed's Hill
(b) This colonel was in charge of the men defending those strategic points and is remembered for uttering the order "Don't one of you fire until you see the whites of their eyes."
Answer: William Prescott
(c) This British general commanded the failed first two charges on the hill that resulted in 1,000 British casualties before succeeding when the American retreated after exhausting their ammunition.
Answer: Thomas Gage
19. Garage Rock revival? Indie bands you can actually listen to without cringing? They do exist! Name the following new bands, given songs for ten points each.
(a) "Reptilia" "Automatic Stop" "The Modern Age"

Answer: The Strokes
(b) "Art Star" "Pin" "Y Control"

Answer: The Yeah Yeah Yeahs
(c) "Leif Erikson" "Obstacle 1" "PDA"

Answer: Interpol
20. Identify these Russian works of art and architecture for ten points each.
(a) First created for Friedrich III, Elector of Brandenburg, the panels lining the inside of this room of the a certain palace were stolen by Nazis in 1941, when they were taken to Konigsberg and their trace was lost. A restored version is now on exhibit, but don't expect to find any mosquitoes trapped in the walls.
Answer: Amber Room
13. Saint nothin' to it. Answer the following questions on sainthood for the stated number of points.
(a) There are three stages a candidate must go through before official sainthood, each level requiring further evidence of a holy life and death. For five points each, name them.
Answer: Venerability, Beatification, Canonization
(b) The latest canonization ceremony took place on October 5, 2003. You get fifteen points if you can name within plus or minus ten the number of saints canonized by John Paul II during his pontificate. You'll get five if you're within 50 .
Answer: $\underline{476}$ (acceptable range for fifteen points: 466-486, for five: 426-526)
14. The first permanent English settlement in America will celebrate its 400 th anniversary in 2007. Answer these questions about the quadricentennial of Jamestown for the stated number of points.
(a) For five, in October 2006, in conjunction with the beginning of the Jamestown festivities, this other Virginia city will celebrate the 225th anniversary of the decisive Revolutionary War battle that took place nearby.
Answer: Yorktown
(b) For ten, for Jamestown's Tercentennial Exposition in 1907, the Smithsonian provided a tableau of Capt. John Smith trading with members of this Native American tribe, by whom he was once taken captive.

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Answer: Powhatan (also accept Algonquin, Pamunkey, or variants of these)
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(c) In December 2006, a London gala will commemorate the 400 th aniversary of the departure of these three ships, which carried the first Jamestown colonists to the New World. FFPE, name them.
Answer: Godspeed (or Goodspeed), Discovery, and Susan Constant (or Sarah Constant)
15. Give the perfectly cromulent word that fills in the blank given these incomplete quotations and their speakers from the Simpsons, ten points each.
(a) "A noble spirit $\qquad$ the smallest man". Spoken by Jebidiah Springfield and Lisa Simpson. Answer: embiggens
(b) "The only monster here is the gambling monster that has enslaved your mother! I call him $\qquad$ ." Spoken by Homer Simpson.
Answer: Gamblor
(c) "What? That's an odd name. I'd have called them $\qquad$ ." Spoken by an Australian clerk at a souvenir store upon seeing a bullfrog.
Answer: Chazzwazzers
16. Name the following works of romantic French literature for ten points each.
(a) The main character believes that life is like a romantic novel and ends up deeply disappointed. She marries a dull country doctor, has disastrous affairs with men who tire of her, and ends up committing suicide to avoid the consequences of her outrageous spending habits.
Answer: Madame Bovary
(b) A young aristocrat falls madly in love with a young girl and persuades her to run away with him. He is devastated that she frequently cheats on him, but follows her when she is exiled to New Orleans anyway.
Answer: Manon Lescaut
(c) The ultimate libertine novel of the 18th century, it chronicles the scandalous schemes of seduction arranged by two aristocrats - the Marquise de Merteuil and the Vicomte de Valmont. Answer: Dangerous Liaisons OR Les Liaisons Dangereuse
17. Answer these questions about recent (2003) events in the European Union, 10 points apiece.
(a) On November 1, Wim Duisenberg, the first head of the European Central Bank, stepped down. Name his replacement, a Frenchman once dubbed the "ayatollah of the franc fort" for his support of a strong French currency.
Answer: Jean-Claude Trichet
(b) Mr. Trichet now inherits a thorny problem: France and Germany are in violation of a certain "pact" that calls for Eurozone states not to run a budget deficit of over 3\%. For another ten points, name the pact.
Answer: Stability and Growth Pact (accept Growth and Stability Pact, prompt on Maastricht)
(c) For a final ten points, what Italian president of the European Commission aroused the ire of the ECB by calling the budgetary rules "stupid" - though he later claimed he had been quoted out of context?
Answer: Romano Prodi (The answer is not Silvio Berlusconi; that venerable gentleman is President of the European Council and, by extension, the European Union, but not president of the European Commission.)
18. Given the recognized captain, name the English Premier League team, ten points each.
(a) Roy Keane

Answer: Manchester United
(b) Patrick Vieira

Answer: Arsenal
(c) Alan Shearer

Answer: Newcastle United
19. Identify these works of literature from their last lines for 15 points each, or for five if you need the more famous first.

15 "It is a far, far better thing that I do, than I have ever done; it is a far, far better rest that I go to than I have ever known."
5 "It was the best of times, it was the worst of times, ..."
Answer: A Tale of Two Cities (Charles Dickens)
15 "He raised his hand and over the desolate earth he traced in space the sign of the dollar."
5 "Who is John Galt? The light was ebbing, and Eddie Willers could not distinguish the bum's face."
Answer: Atlas Shrugged (Ayn Rand)
20. 30-20-10. Identify the following concept from mathematics:

30 In 1990, Paul Erdos said that: "Aliens invade the earth and threaten to obliterate it in a year's time unless human beings can determine" a value from this mathematical concept.
20 The proof of the infinite case of this basic theorem of this area of mathematics is a classical example of double induction.

10 This generalization of the pigeonhole principle is generally attributed to a mathematician/economist. This theorem usually gives an elegant existence proof but horribly large bounds.
Answer: Ramsey theory OR Ramsey constant OR $\underline{\mathrm{R}(6,6)}$
21. For each of the following concepts in observational astronomy, say whether it is relevant to *photometry*, *spectroscopy*, *both* or *neither* (five points each)
(a) CCD thermal noise

Answer: both
(b) Eyepiece focal length

Answer: neither
(c) Linear dispersion

Answer: spectroscopy
(d) Calibrated V-band magnitude

Answer: photometry
(e) focal ratio or f-number Answer: both

