

Cardinal Classic XI Packet by Berkeley A

Jon Pennington, Nick Meyer, Ross Ritterman, Steve Kaplan

Round 7

Tossups

1. Recently shocked by the death of former bassist and vocalist Ben Orr were fans of this band that had top 10 hits with "You Might Think" and "Drive". Emerging (*) in the late 70s led by guitarist and vocalist Ric Ocasek, they sold over 6 Million copies of their second album Candy-O and their song "It's All I Can Do" appeared on Volume 2 of the Wedding Singer Soundtrack. FTP, name this band whose big break came in 1981 with the release of Shake It Up whose title track was their first Top 10 single.

Answer: The Cars

2. The narrator argues for the abolition of monarchy after a group of kings unjustly decides in favor of his brother Perses [PUR-sees]. The poem states that men were made of ash-trees during the fourth age of mankind. It also explains the origin of marriage and agriculture by showing how the gods tricked Epimetheus (*) into releasing Pandora from captivity. FTP, what is this Greek epic by Hesiod?

Answer: Works and Days (accept Greek title if offered)

3. Richard Feynman was the first to propose the construction of this type of device, which would exploit the physical laws of the universe to do Fourier transforms very quickly. In 1994, Peter Shor (*) discovered that, if one could be built, he could factor integers in polynomial time. Due to entanglement problems, most experts believe it will be several decades before one is built. FTP, name this device that would process qubits (Kyew-bits) instead of bits.

Answer: Quantum Computer

4. He was prominent in South Carolina politics in the 1770s and 1780s. He served two stints in the continental congress as well as four years as governor. He was appointed to the U.S. Supreme Court (*) in 1789 as an associate justice but resigned in 1791. FTP, name this jurist who was reappointed in 1795 but was never confirmed by the senate as the second chief justice of the Supreme Court.

Answer: John Rutledge

5. Much of her work is influenced by injuries she sustained after being hit by a bus (*). Her style is deliberately naïve drawing on simplified color fields and the folklore of her native Mexico. FTP, name this surrealist painter wife of muralist Diego Rivera.

Answer: Frida Kahlo

6. The viscosity of this substance is determined by whether proteoglycans (pro-TEE-o-glye-cans) have been degraded by inflammatory cell enzymes. If arthrocentesis (are-THRO-sen-tee-sis) finds sodium urate (*) in this liquid, then gout is probably present. Bursitis occurs if too much gets secreted. FTP, name this fluid that lubricates joints not lubricated by blood.

Answer: synovial fluid

7. A key aspect of his domestic policy was "Official Nationality" which focused on orthodoxy, autocracy, and nationality. (*) His rule is considered one of the most reactionary of the 19th century in contrast to the rule of his grandmother Catherine the Great. FTP, name this Tsar who ruled from 1825 to 1855 and died during the Crimean War.

Answer: Nicholas I

8. The narrator is a former Master of Chancery who was close friends with John Jacob Astor. The title character, who refuses to eat anything except ginger nuts, dies of starvation in prison (*) after he refuses to vacate his employer's abandoned Wall Street office. FTP, name this short story, about a copyist with the motto "I prefer not to," written by Herman Melville.

Answer: Bartleby, the Scrivener: A Story of Wall Street

9. **The study of this began at the Lausanne school of Vilfredo Pareto and Leon Walras [Vahl-RA] but has been reshaped and popularized under economists Arrow and Debreu. It is typically studied in an Edgeworth (*) Box exchange economy situation in which it has been proven that through exchange between actors a competitive equilibrium can be reached through re-allocation of resources and that allocation will be Pareto-optimal. FTP, name this branch of analysis in economics which seeks to prove mathematically the simultaneous equivalence of supply and demand in all markets.**

Answer: General Equilibrium Theory (prompt on Equilibrium Theory, do not accept Partial Equilibrium)

10. **The third movement of this symphony, composed in London and finished just after Mozart's death, is a humorous minuet. The first movement is a gentle adagio. A theme which sounds a lot like "Twinkle, twinkle little star" (*) appears in the second movement, an Andante, but it is suddenly interrupted by a tympani chord. For ten points, identify this G-major Haydn symphony.**

Answer: the Surprise symphony or Symphony No. 94

11. **Memo Harris is Pop Fisher's niece. Pop is the coach (*). Bump Baily is an outfielder who dies after running into a wall in the outfield. After Bump's death the protagonist ascends to superstar status. This is after he is shot with a silver bullet and disappears for 15 years. FTP, name this novel about the rise and fall of Roy Hobbs, written by Bernard Malamud.**

Answer: The Natural

12. **According to Keats, "She was a Gordian shape of dazzling hue...and full of silver moons." The daughter of Libya and Belus (*), according to legend, Zeus engaged in an affair with her and this of course brought down the wrath of Hera. She was thus compelled to eat her own children and subsequently developed a taste for children. FTP, name this lesser monster of Greek mythology whose story was used by Greek mothers to get their children to behave.**

Answer: Lamia

13. **In 1720 this man was appointed to the superior council of Pondicherry and in 1731 was made superintendent of the trading station in Chandernagore, Bengal. Eleven years later he was made governor-general of India. When (*) the treaty of Aix-la-Chapelle ended the War of Austrian succession, he embarked on schemes to advance the French position in India but was beaten back by the British in 1751 and was recalled to Paris. FTP, name this French diplomat whose forces were often defeated at the hands of his rival, brilliant British soldier Robert Clive.**

Answer: Joseph-Francois Dupleix (Doo-Pley)

14. **It has ice geysers emanating from its pink surface (*), remarkable geologic activity for a surface that is the coldest as yet discovered in the solar system. It rotates in a retrograde fashion, a fact as yet unexplained. These facts were uncovered in 1989 during the Voyager 2 flyby. FTP, name this moon, the largest of Neptune.**

Answer: Triton

15. **The name's the same. In a 1953 film, he is a teacher who forces children to practice piano by putting them in prison camp. It is also the nickname of Sullivan Travis who has an affair with (*) a golf instructor after his wife is institutionalized because of the Hypatia syndrome. It is also the title bestowed when awarding a Ph.D. to the portrayer of B.A. Baracus. FTP name this gynecologist played by Richard Gere in a recent Robert Altman movie.**

Answer: Doctor T [do not accept Mister T, "I pity the fool who don't respect my dissertation."]

16. **He is responsible for choosing both the site and design of Independence Hall in Philadelphia. A Scottish immigrant (*) he was appointed Attorney General of Pennsylvania in 1717 and also served twelve years in the provincial assembly. FTP name this early American colonist best known for helping protect freedom of the press by defending publisher John Peter Zenger against a seditious libel charge.**

Answer: Andrew Hamilton

17. **In dimension 5 and above, there are only 3 regular ones. In 4 dimensions, there are 6 regular ones, including the 120-cell (*) and the 600-cell. In 3 dimensions, the 5 regular ones are named after an ancient Greek.**

Regular or not, all 3 dimensional ones satisfy $V - E + F = 2$. FTP, give the mathematical term for this type of solid, whose 2 dimensional analog is "polygon".

Answer: Polyhedron (accept Polyhedra, prompt on solid)

18. Forerunners of it were ones supposedly written by Saint Athanasius and another found in North Italy but its modern incarnation was reached in the early 4th century. A strict formulation (*) was necessary because of the controversy about Christ's nature being caused by a priest from Alexandria named Arius. FTP, name this confession of faith spoken by both Roman Catholics and Eastern Orthodox Christians during the liturgy that takes its name from a 325 Church Council held in Asia Minor.

Answer: The Nicene Creed

19. A plebiscite resulting from it returned Northern Schleswig to Denmark. Poland was given (*) large tracts of land from Germany. These and other concessions cost Germany thirteen percent of the land in Europe. FTP, name this treaty, which was never, ratified in the United States despite the efforts of president Woodrow Wilson.

Answer: Treaty of Versailles

20. Movie directors who appear in this film include John Ford, Erich von Stroheim, and Raoul Walsh, who plays an assassin. Joseph Henabery plays 14 different roles including Raoul Walsh's victim, (*) Abraham Lincoln. When Woodrow Wilson saw it, he said it was like "history written with lightning." FTP, name this racially controversial epic by D.W. Griffith.

Answer: Birth of a Nation (or the Clansman)

21. If you're from Sweden, you're a Swede; for this country, the word for a native is a palindrome. The main island consists of a narrow ring of green surrounding an ecologically devastated region (*) that has been mined down to the native rock. In recent years, this country has become a major player in international money laundering. FTP, name this nation, once called the pleasant island, named for its now-depleted deposits of Guano.

Answer: Nauru

22. It was built by Marcus Aemilius Scaurus in 109BC and is usually depicted in painting with soldiers on the left of it being led by a majestic figure upon a white horse with opposing forces on the right being led by a lesser character in black whose soldiers are shown falling into the Tiber. Historically, this site (*) is spoken about in connection with the appearance of the letters Chi and Ro in a vision to Constantine The Great accompanied by the words "In this sign, Conquer". FTP, name this site, the location of a 312AD battle on the outskirts of Rome where Constantine defeated his rival Maxentius.

Answer: The Milvian Bridge

23. On June 5, 1455, after a violent quarrel broke out in the cloisters of Saint-Benoît [Ben-Wa] this man killed a priest with a sword thrust. He was later pardoned but then after having stolen again he was banished from Paris and then began writing his poem The Legacy. Eventually (*) he got in yet another fight and was condemned to be hanged and strangled. FTP, name this late medieval french poet, who, under his death sentence, made a plea to God against the justice of men in his most famous Ballade des Pendus or Ballad of the Hanged.

Answer: Francois Villon [VEE-own]. (Accept Francois de Montcorbier or Francois des Loges)

24. Aeneas and Psyche were able to pacify it with a honey cake. Hercules was able to capture it with his bare hands (*). Orpheus charmed it with his lyre. These were the few who were able to avoid this guard. FTP, name this dragon tailed, three headed guard of the gates of Hades.

Answer: Cerberus

25. It was synthesized from calf thymus and beef spleen in the 1890s, but its structure was not published until 1900. Skin cancer may result from ultraviolet light creating mutations that promote overproduction of this substance. The codon corresponding to phenylalanine consists of this (*) pyrimidine repeated three times. FTP, name this nucleic substance found in DNA, but not RNA.

Answer: thymine

26. As recounted in a 1998 best seller, professor James Murray was the first head of the project behind its creation. Its largest outside contributor was the mysterious William Minor (*), who – as Murray found out later

– was a remarkably learned madman and murderer who resided in Broadmoor asylum. Minor mined his large library for representative examples in the history of words, and eventually contributed ten thousand quotes to the project over four hundred thousand entries. FTP, name this enormous reference work, whose first edition took seventy years to complete.

Answer: The Oxford English Dictionary (accept OED)

REPLACED TOSSUPS DO NOT USE

10. When relations between Britain and this country soured, queen Victoria asked that 6 gun boats be dispatched to decimate its navy; when told that the country was landlocked, the queen called for a map and scissors and cut this country from the world. However, this country has at times maintained a navy in the large lake (*) on its northwestern border. It's military excursions have been disastrous, causing it to lose wild-rubber forests to Brazil, the nitrate-rich province of Atacama to Chile, and, in the war of the Chaco, much of it's remaining area to Paraguay. FTP, name this country.

Answer: Bolivia

Bonuses

1. Identify the following legal terms on a 5-10-15 basis.

- a) First FFP, when the performance of something is outstanding and a third party holds onto money or a written document until a certain condition is met between the two contracting parties. It is something that is usually closed with regards to buying a house.

Answer: Escrow

- b) FTP, this is defined as any wrongful act, caused either intentionally or due to negligence, that does not involve a breach of contract and for which a civil suit can be brought.

Answer: Tort

- c) F15P, this is a Latin phrase that means that both parties in a dispute are equally at wrong and the law will not intervene.

Answer: In pari delicto

2. 30-20-10 name the artist:

30: He created a series based on the well-known art of Picasso, Matisse, and Monet, and another series based on Chinese landscape paintings.

20: He put text in many of his paintings such as Takka Takka and Grrrrrrr!

10: He painted with Ben-Day dots imitating the style of comic strips.

Answer: Roy Lichtenstein

3. Eve Plumb played Jan Brady in the first incarnation of the Brady Bunch, but she is not the only actress to play this neurotic character. FTPE, name these actresses who played Jan Brady:

- a) This actress made her film debut portraying Jan Brady in the Brady Bunch Movie, then reprised her role in A Very Brady Sequel.

Answer: Jennifer Elise Cox

- b) This actress, who appeared on Saturday Night Live from 1991 to 1994, often played Jan Brady on Kevin Nealon's Weekend Update. She also appeared in a hilarious sketch about a battle of the bands between the Bradys and the Partridge Family.

Answer: Melanie Hutsell (please note the "t" may be silent)

- c) When Eve Plumb turned down the chance to appear in the Brady Bunch Variety Hour, the producers of the hideously bad variety show replaced her with this perky actress who appeared in I Dismember Mama. Brady fanatics refer to her as "fake Jan."

Answer: Geri Reischl

4. Answer the following questions about Gunter Grass's the Tin Drum FSNOP:

- a) For 10 pts., name the owner of the Tin Drum who refuses to grow to adult size as a protest against the absurd behavior of the adults around him.

Answer: Oskar Matzerath (accept either first or last name)

- b) For 5 pts, the Tin Drum is part of a trilogy honoring what city currently known as Gdansk?

Answer: Danzig

- c) Five pts. for one, 15 pts. for both, name the two other books in the Danzig trilogy.

Answer: Cat and Mouse (or Katz und Maus) and Dog Years (or Hundejahre)

5. Given an older, non-standard name for a chemical compound, give its modern name according to current nomenclature systems FTPE:

- a) prussic acid

Answer: hydrocyanide or hydrocyanic acid

b) Formic acid

Answer: methanoic acid

c) Vitriol

Answer: sulfuric acid or dihydrogen sulfate or hydrogen sulfate

6. Identify the following women associated with French Impressionism FTPE:

a) She was the granddaughter of Fragonard and the sister-in-law of Edouard Manet. Her most famous paintings include the Cradle and Madame Pontillon Seated on the Grass. She is the subject of Manet's The Repose.

Answer: Berthe Morisot

b) She was the first woman awarded the Grand Cross of the Legion of Honor in honor of her animal-themed paintings such as The Horse Fair and Playing with Oxen. She was also the lover of American artist Anna Elizabeth Klumpke.

Answer: Rosa Bonheur

c) She had artworks accepted to the Paris Salon before Manet did, but she is better known as the nude model in Manet's Olympia and Luncheon on the Grass. You may provide either her first or last name.

Answer: Victorine (or Victorine Meurent)

7. Answer the following questions about the history of book burning FTPE:

a) According to legend, this emperor burned all the books in China so that all knowledge would begin with his reign.

Answer: Shih Huang-ti or Shi Huangdi or (Hsing-Ming) Chao Cheng

b) This Dominican friar incinerated hundreds of books by Dante and Boccaccio in several "bonfires of the vanities" during the 1490s.

Answer: Girolamo (or Jerome) Savonarola

c) This psychoanalyst and social theorist, who wrote the Mass Psychology of Fascism, had his books burned by the Nazis for their blend of Freudianism and Marxism. After fleeing to America, the Food and Drug Administration burned his books, because of his pseudoscientific theories about orgone (oar-GOAN) energy.

Answer: Wilhelm Reich

8. Answer these questions about Dragonball Z, a cartoon series imported from Japan FTPE.

a) Name the hero of this series, whose name rhymes with the french for "many".

Answer: Goku (not *beaucoup*)

b) Name Goku's battle cry, which, oddly enough, is the same, the name of the King of Hawaii who united the Island in 1810.

Answer: Kamehameha

c) Name the enigmatic "prince of saiyans" ultimately Goku's ally and adversary, whose name is comprised of the first six letters in a "twenty questions" category.

Answer: Vegeta (not vegetable)

9. Identify these literary men who wrote about socialism FTPE:

a) This member of the Fabian society wrote The Intelligent Woman's Guide to Socialism and Capitalism.

Answer: George Bernard Shaw

b) In his essay "The Soul of Man under Socialism," this poet and playwright argued that socialism will free mankind of "the sordid necessity of living for others," which would allow English art and literature to flourish.

Answer: Oscar Wilde

c) In addition to publishing Socialism and the Family, he wrote a novel about the Eloi and the Morlocks that satirizes the British class system.

Answer: H(erbert) G(eorge) Wells

10. Name these people and concepts from Graph theory FTSNOP.

- a) FFP, a circuit on a graph that contains every edge without repetition is called this.

Answer: Euler or Eulerian

- b) In 1976 these two computer scientists at the University of Illinois were the first to prove the four-color theorem. FFPE, name them.

Answer: Wolfgang Haken and Kenneth Appel

- c) F15P, name the theorem that states that a graph is planar if and only if it does not contain a subgraph homeomorphic either to the complete graph on 5 points or to the complete bipartite graph on 2 sets of three points.

Answer: Kuratowski's Theorem

11. Identify these Bacons by description FTPE

- a) He was an English scholastic philosopher who was perhaps the first European to use gunpowder.

Answer: Roger Bacon

- b) A young plantation owner he rebelled against colonial governor William Berkeley for not adequately protecting settlers from Indians.

Answer: Nathaniel Bacon

- c) He was an Irish born artist known for his paintings of screaming popes.

Answer: Francis Bacon

12. Name the Vice Presidents from description for 15 or 5 if you need the president they served under.

- a) 15- He operated a saloon and had many illegitimate children. He was popular as an Indian fighter and claimed to have killed Tecumseh himself.

5- Martin Van Buren

Answer: Richard Johnson

- 15- He broke a tie in the Senate voting against the recharter of the Bank of the United States. He was the first VP to serve under two presidents and the first to die in office.

5- Thomas Jefferson and James Madison

Answer: George Clinton

13. Name these Jewish holidays for ten points each.

- a) This holiday also known as the Feast of Tabernacles it marks the end of the harvest and occurs on the 15th of the month of Tishri.

Answer: Sukkot

- b) It occurs seven weeks after Passover in the month of Sivan. It is a thanksgiving of the grain harvest.

Answer: Shavuoth

- c) It is a joyous holiday that commemorates the deliverance from the destruction of the reign of Xerxes.

Answer: Purim

14. Name these characters from literature who may or may not have something in common FTPE.

- a) She appears in Henry IV parts I and II and Henry V as the hostess of the Boar's Head Tavern, and in the Merry Wives of Windsor as the servant of Doctor Caius.

Answer: Mistress Nell Quickly

- b) He is the evil dwarf in Dickens Old Curiosity Shoppe.

Answer: Daniel Quilp

- c) This charismatic character from Nabokov's *Lolita* steals the title character from Humbert Humbert, who eventually shoots him; he is played brilliantly by Peter Sellers in the 1962 version of the movie.

Answer: Clare Quilty

15. Answer these questions about bond trading FTPE

- a) Name the book by Michael Lewis about his days as a Salomon Brothers bond salesman during the turbulent 1980s

Answer: Liar's Poker

- b) One of the heroes of liar's poker – indeed, the foremost player of the title game – was this leader of Salomon's government bond trading program.

Answer: John Meriwether

- c) After leaving Salomon, Meriwether started this hedge fund whose fantastic four year run ended in crashing failure in 1998, when the fund had to be bailed out by a consortium of investment banks.

Answer: Long-Term Capital Management (Accept LTCM)

16. Identify each of the royal house of the following three Henry's made famous in the War of the Three Henry's FTPE.

- a) This Henry was the moderate but devious King of France at the time of conflict.

Answer: Henry (III) Valois [Val-Wa]

- b) This other Henri ruled Lorraine and led the ultra-Roman Catholic Holy League.

Answer: Henri (I) Duke of Guisse [Geese]

- a) This final Henry was the King of Navarre and won the War to become the new King of France.

Answer: Henry (IV) Bourbon

17. Identify the following biological terms that begin with the letter "N" FTPE:

- a) It is a supporting rod found in all members of phylum Chordata at some point in the life cycle. In higher vertebrates, it is only present in the embryo, before being replaced by vertebrae.

Answer: notochord

- b) This adjective refers to birds that leave the nest shortly after being hatched.

Answer: nidifugous [nigh-DIFF-you-gus]

- c) This term refers to the retention of juvenile or larval characteristics after an animal has reached sexual maturity. The gills of the North American tiger salamander and the faces of adults with Down syndrome are both examples of this phenomenon.

Answer: neoteny [nee-ought-uh-knee]

18. Identify the following rock musicians of recent acclaim who are progeny of more famous stars on a 5-10-15 basis.

- a) First for 5, the band led by him released an eponymous album in 1997 with the Grammy award winning song "One Headlight" and most recently released the album Breach.

Answer: Jakob Dylan (prompt on Dylan)

- b) Second for 10, he arrived on the music scene in 1999 with a self-titled album that included his song "Darker Side of Blue" which was featured on "NYPD Blue" and a bigger hit with "She's So High." He's the son of Randy but it is questionable whether or not he took care of business.

Answer: Tal Bachman (prompt on Bachman)

- c) Finally for 15, he released his first album entitled 100 Year Thing in 1998 and had hits with "Voyeur" and "God Won't Make You A Man". The title track, according to VH-1, is so reminiscent of CSN that it wouldn't be at all surprising to imagine them performing it.

Answer: Chris Stills (prompt on Stills)

19. 30-20-10 Name the Philosopher:

30: He was born in Lycopolis, Egypt and upon meeting Ammonius Saccas exclaimed, "I have found the man I need".

20: His books, called the Enneads were put in order by Porphyry who also wrote an account of his life.

10: Like Plato, he believed in a One to which all things are dependent on, the Nous or mind, and a World Soul and is thus considered the founder of the Neoplatonic school.

Answer: Plotinus

20. In general, two steps are involved in converting analog signals to digital.

(a) FTP, what is the process of capturing the value of a signal periodically, turning a continuous-time function into a discrete sequence?

Answer: sampling

(b) FTP, what is the other step, converting each sampled value into one of a set of discrete values?

Answer: quantization or slicing

(c) FTP, this is the simplest way to reconstruct an analog signal from a digital one. What is the term for keeping the analog output steady at the digital value for a whole cycle?

Answer: zero-order hold

21. Identify the following metaphysical poets from clues on a 10-5 basis.

a) 10: He was born to a Roman Catholic family during a time of anti-Catholic sentiment and was thus refused any royal posts in King James I's court. His first book of poems was entitled *Satires*.

5: His more famous works are "Love's Alchemy", "The Sun Rising" and "The Flea".

Answer: John Donne

b) 10: A key figure at court and close to the king, he took part in the King's military expeditions to Scotland. In April 1642 he presented a Royalist petition to Parliament favoring the restoration of the Anglican bishops who had been excluded from the Long Parliament. He was subsequently imprisoned in Westminster Gatehouse.

5: Poems of his include "Love Conquer'd", "A Paradox", and "Ode. To Lucasta. The Rose".

Answer: Richard Lovelace

c) 10: This poet was the son of the man who officiated over the execution of Mary, Queen of Scots. He was a fellow of Peterhouse College but was forced to resign due to his Catholic leanings. He lived in poverty in Paris but was introduced to Charles I's wife Henrietta Maria and was sent to Rome with a recommendation to the Pope.

5: Famous works include "Two Went Up into the Temple to Pray", "Christ Crucified" and "Music's Duel"

Answer: Richard Crashaw

22. 30-20-10 name the tourist site.

30: An underground staircase was recently discovered leading from Tiberius' retirement villa to this site.

20: This site, which Tiberius used as his private swimming pool, is located on the Italian isle Capri.

10: The name of this cave comes from its eerie radiance caused by sunlight reflecting off smooth white sand near its narrow entrance.

Answer: Blue Grotto (accept the Italian: Grata D'azzurra)

23. Name the characters from *The Sun Also Rises* from descriptions 5-10-15.

a) 5- He is the protagonist, he lost the ability to reproduce after being shot down in the war.

Answer: Jake Barnes

b) 10- She is a nihilist flapper and object of desire for Jake. She has affairs with one of Jake's friends and a young bullfighter named Pedro.

Answer: Brett Ashley

c) 15- He is a much-ridiculed romantic who has an affair with Brett. He is a former Princeton boxer and beats up Pedro after he finds out he has lost Brett to him.

Answer: Robert Cohn

24. Identify the following two ancient Indian cities F15PE:

- a) A village on the left bank of the now dry Ravi River in East Pakistan, it stands on an extensive series of mounds that were excavated by Sir John Marshall in 1921. It is the 2nd largest city discovered of the once great Indus Valley Civilization.

Answer: Harappa

- b) This city, now also a bunch of mounds, sits on the right bank of the Indus River in Sind Province Southern Pakistan. This city supposedly had houses with bathrooms and streets much like in more modern civilizations and remarkable drainage and sanitation. Its name translates to “Mound of the Dead.”

Answer: Mohenjo-Daro

25. In this bonus, we combine high and low art. Answer the following F15PE.,

- a) First in the south park episode spoofing the Elian Gonzalez saga, Kenny sings this operatic Italian song, a huge hit for Andrea Bocelli. F15P, name it.

Answer: Con Te Partiro

- b) The Billy Joel song “this night” from the album “Innocent Man” takes its melody from the second movement from this Beethoven work. F15P, name it.

Answer: Sonata Pathetique (accept the words in either order)

26. Answer several questions about the following electromagnetic scenario. A horizontal current carrying wire has a positive static charge density. A charged particle travels parallel to the wire at some distance above it with a constant velocity.

(a) For ten points, can you determine the sign of the particles charge if it travels in the same direction as the current?

Answer: no

(b) If the charge density on the wire is doubled, by what factor should the current change in order for all other parameters, including the particle velocity, to remain the same?

Answer: doubled (factor of 2)

(c) The distance between the particle and the wire is doubled, while the particle remains the same and the current in the wire is unchanged. By what factor should the charge density on the wire change if the particle is to keep the same velocity?

Answer: no change (factor of 1)

REPLACED BONUSES DO NOT USE

20. Identify these wars of Louis XIV FTPE.

a) Louis invaded the Rhineland in an attempt to claim the Palatinate for his sister in law. It lasted from 1688 to 1697 and is named for his opposition in the war. It was settled by the treaty of Ryswick.

Answer: War of the League of Augsburg

b) Louis fought this war on behalf of his grandson Philip who would never become King of France. It ended with the Treaty of Utrecht.

Answer: War of the Spanish Succession

c) Louis invaded the Spanish Netherlands claiming an inheritance for his wife. It was settled by the treaty of Aix-la-Chapelle in 1668.

Answer: War of Devolution

21. Answer these questions about a certain goat from Greek Mythology FTSNOP.

- a) F15P, this goat was the nursemaid of the infant Zeus.

Answer: Amalthea

- b) FFP, this was the name of one of Amalthea's horns from which unending good things flowed.

Answer: Cornucopia

- c) FTP, from Amalthea's hide, Zeus made this impenetrable shield, which he eventually gave to Athena.

Answer: Aegis