2001 JCV
Questions by Maryland Dental School

1. The ancient Greeks knew only one example of this mathematical concept. The 9th century Arab scholar Thabit ibn-Qurra discovered a sufficient condition for them, which Euler later generalized. Descartes, Fermat, Legendre found more examples, but all missed the second smallest pair, which was discovered in 1866 by B. Paganini, a 16-year old math student. Identify these pairs of numbers, in which each number is the sum of the proper divisor of the other, the smallest example of which, FTP, is 200 and 284.
Answer: **amicable** numbers or **amicable** pairs

2. About 5000 American troops defeated some 15,000 enemy troops and inflicted about 1500 casualties while American losses totaled 746. Fought on February 22-23, 1847, general Santa Anna's forces retreated, and General Taylor was left in control of northern Mexico. By weakening Santa Anna's forces, Taylor helped the American campaign in the south, hastening the end of the Mexican War. FTP, name this battle in a village of the state of Coahuila, Mexico, south of Saltillo which later help elect Taylor president.
Answer: Battle of **Buena Vista**

3. This author collaborated with Mylius and Moses Mendelssohn before writing the tragedy _Miss Sara Sampson_. In 1767, he produced the comedy _Minna von Barnhelm_, and two years later wrote _Hamburg Dramaturgy_, a critical work that attacked the formalism of neoclassicism. FTP, identify this German man of letters and author of _Education of the Human Race_, _Nathan the Wise_, and the essay _Laocoon, or on the Limits of Painting and Poetry_.
Answer: Gotthold Ephraim **Lessing**

4. Symptoms include, an illusion of invulnerability, unquestioned belief in the group's morality, rationalization, a stereotyped view of the opponent, conformity pressure, self-censorship, an illusion of unanimity, and mind guards. Used to explain how the Bay of Pigs, Pearl Harbor, and the Challenger disasters happened. FTP name this phenomenon defined as the tendency of decision-making groups to suppress dissent in the interest of group harmony.
Answer: **Groupthink**

5. This saint's feast day is December 26th. He was one of the seven to manage the finances and alms of the early church. He was also probably one of the Hellenists. He was charged by the Jewish authorities for speaking against the Temple and the Law, and was tried by the Sanhedrin. FTP, name this man who was later stoned to death to become the first Christian martyr.
Answer: St **Stephen**

6. It was created in 1876 for Tsar Alexander and because he feared assassination attempts Tsar Alexander required that it arrive in clear bottles so that weapons could not be hidden. It has gained popularity in the US in recent years and is seen as the most prestigious beverage to drink. FTP name this champagne often featured in rap and hip-hip videos.
Answer: **Cristal**

7. Published in 1949, this play deals with the frustrated lives of Doc and Lola, a couple who have been unhappily married for twenty years. Doc consoles himself by drinking and fantasizing about their young boarder, Marie, while Lola sublimates her pain by pining for her lost dog. Their frustration culminates when Doc wrecks their home and nearly kills Lola. FTP, identify this play named for the dog Lola has lost, written by William Inge.
Answer: **Come Back, Little Sheba**

8. Cloud Ten Productions has enlisted churchgoers to spread the word about this film and has asked 600 "sponsors" to donate $3000 each to book the film in theaters. Even more unusual, this film was released on video last fall. It stars Kirk Cameron as TV journalist Buck Williams, who discovers that millions of people have vanished from earth and those who have remained face an uncertain future. FTP, this film was based on the first book of what best selling Christian book series?
Answer: **Left Behind**

9. One man of this name was the first husband of Clytemnestra, whom Agamemnon killed. The more famous mythological figure was a Lydian who ruled the region of Mount Sipylus. His children included the sculptor Broteas and the unfortunate Niobe. One story tells how Pandareos gave him a stolen guard-dog to look after, but denied having ever seen it when Hermes came looking for it. FTP, identify this man who was punished in Tartarus for having served his son Pelops to the gods.
Answer: **Tantalus**

10. Born October 2, 1969 in Stratford, New Jersey, she left Camden County Community College to pursue an acting career. Appearing on USA Network's Dance Party USA in the '80s, in 1990 she gained the role, which until recently, brought her the most success. FTP, name this actress, who will continue in her role as Hayley Vaughan Santos on All My Children even though she has become Regis Philbin's cohost on LIVE.
Answer: Kelly **Ripa**

11. This poem reflects the legend of a bookish recluse named William Blackstone who greeted Boston's first settlers on what is now Boston Common. In this series of nine poems, the poet takes Blackstone as an emblem of the free spirit in American life, describes his later wanderings, and tells of other heroes, legendary and real, who appear as America moves west. FTP, name this poem by Conrad Aiken whose title shares it name with a 2000 Disney Movie starring Bruce Willis.
Answer: **The Kid**

12. Mrs. Richard Hall, who took up this instrument for her health, commissioned several works from famous composers, including the _Choral Varie_ from Vincent D'Indy, and the _Rapsodie Arabe_ from Debussy. Glazunov wrote a concerto for it and string orchestra, and Milhaud's orchestration of his _Scaramouche_ suite features it. Its most famous use in a classical piece is in _The Old Castle_ from Ravel's orchestration of _Pictures at an Exhibition_. FTP, identify this instrument that first gained popularity in French military bands, developed in the 1840's by Adolphe Sax.
Answer: **saxophone**

13. The name sounds the same: A+, Yung Wun (Young One), Eve, Drag-On, DJ Shok, and DMX form one. The other group was commanded by Leonard Wood and formed a volunteer cavalry regiment in the Spanish-American War. FTP give the shared name of the group of rappers and the regiment that included Teddy Roosevelt and that charged up San Juan Hill.
Answer: **Rough Riders** (Ruff Ryders is the name of the rap group)

14. Slow Ride, Slow and Low, The New Style, Hold it Now Hit It, Posse in Effect, Time to Get Ill, Girls, Rhymin & Stealin, She's Crafty, Paul Revere, Brass Monkey and No Sleep Till Brooklyn. These songs as well as Fight for Your Right, all appeared, FTP, on what 1986 smash hit album by the Beastie Boys.
Answer: **Licensed to Ill** (Prompt on Beastie Boys on early buzz)

15. Born in Minnesota, this man became professor of Chemistry at the University of California in 1947. A year later, he helped elucidate the Thunberg-Wieland cycle, a process by which some bacteria synthesize glucose from acetate. By examining the behavior of the Chlorella alga, he determined a reaction in which carbon dioxide is fixed by ribulose biphosphate to form PGAL and then glucose. FTP, identify this chemist who won the 1961 Nobel Prize in Chemistry for his eponymous cycle.
Answer: Melvin **Calvin**

16. Her marriage to Arthur Kober ended in divorce. She later lived with the author of _The Thin Man_ who advised her on writing. Her _Watch on the Rhine_ voiced her antifascist sentiment through her protagonist, Kurt. Her _The Autumn Garden_ takes place on the Gulf Coast which was similar to the one that she visited as child. FTP, name this author was better known for _The Little Foxes_.
Answer: Lillian **Hellman**

17. Painted in the Brancacci Chapel of Santa Maria del Carmine in Florence, this fresco is grouped into three episodes. In the middle, Christ is surrounded by his disciples along with an official who stands with his back to the viewer. On the left, Saint Peter can be seen kneeling and groping around in a fish's mouth. In the third scene, Peter thrusts into the hand of the tax collector the coin he found in the fish. FTP, this is a description of what 1427 fresco by Masaccio?
Answer: The **Tribute Money**

18. Also called Osteitis deformans, this disease is a condition of abnormal resorption and apposition of osseous tissue in one or more bones. The disease may involve many bones simultaneously, but it is not a generalized skeletal disease. It is initiated by an intense wave of osteoclastic activity with resorption of normal bone resulting in irregular shaped resorption cavities. FTP, name this disease which shares its name with a former guard of the Kentucky Wildcats.
Answer: **Paget**'s Disease

19. Born the same day Bobby Thompson hit "the shot heard round the world", he went on to attend the University of Minnesota. Drafted by the Minnesota Vikings, Utah Stars and Atlanta Hawks, he chose to sign with the San Diego Padres. Stints with the Yankees, Angels, Blue Jays, Twins and

Indians would follow. FTP name this baseball great whose 3110 career hits helped him gain election to the Baseball Hall of Fame in 2001.
Answer: Dave **Winfield**

20. Born in a town which sounds like a brand of juice, this man was the son of a shoe salesman. He spent most of his childhood in Dixon. He won a scholarship to Eureka College where he majored in economics where he was president of the student body, member of the football team, and captain of the swim team. Upon graduation, he took the job as a local radio sportscaster. He later starred in such movies as _King's Row_, _The Winning Team_, and _Million Dollar Baby_. FTP, name this man born in Tampico, Illinois, who was in the movie _Bedtime for Bonzo_ and later became 40th president of the United States.
Answer: Ronald **Reagan**

21. In this interaction, the incident photon collides with an outer electron, which receives kinetic energy and recoils from the point of impact. The incident photon is then deflected by its interaction and is displaced from the site of the collision. The energy of the displaced photons equals the energy of the incident photon minus the kinetic energy gained by the recoil electron plus its binding energy. FTP, name this type of scatter which describes one of the three interactions that x-rays take part.
Answer: **Compton** Scattering

22. This man's works include _The Contents of Children's Minds_ and _Life and Confessions of a Psychologist_, but his most important work was probably 1904's _Adolescence_. After studying under Wundt, he became a professor at Antioch College, and, as the first president of Clark University, he developed its education courses. FTP, identify this man who is best known for founding the _American Journal of Psychology_ in 1887.
Answer: Granville Stanley **Hall**

23. George Badger, Frances Granger, John Crittenden, John Bell, Thomas Ewing, John C. Calhoun and Daniel Webster. These men were all cabinet members of, FTP, which president, the first to get married while in office, who became president following the death of William Henry Harrison.
Answer: John **Tyler**

24. Closed in 1995 in response to the Oklahoma City bombing. Talk to reopen in during Bush's campaign prompted the secret service to make a video to demonstrate how easy it would be for a major disaster to happen. FTP, name this road whose reopening status is still uncertain and which gives the White House its famous address.
Answer: **Pennsylvania Avenue**

Round 9

1. Given characters from a Shakespeare play, name the play for ten points each.
1. Caius Martius, Tullus Aufidius, Menenius, Cominius
Answer: The tragedy of **Coriolanus**
2. Diomedes, Pandarus, Calchas, Achilles
Answer: **Troilus** and **Cressida**
3. Malvolio, Cesario, Viola, Sebastian
Answer: **Twelfth Night** or **What You Will**

2. Identify these terms from differential equations FTP each.
1. This type of differential equation can be rewritten the form M of x dx plus
N of y dy equals 0, where M is a function of x only and N is a function of y only, which allows a direct integration process to be used.
Answer: **separable**
2. A second order linear equation where the independent variable function term equals zero is called this type of equation and are much easier to solve.
Answer: **homogeneous**
3. Named for a 19th century Polish mathematician, this determinant can be used to check that a solution of a linear homogeneous equation is general.
Answer: **Wronskian** determinant

3. Identify the following actors from roles on a 10-5 basis.
1. 10. Jenna Avid on Baywatch Hawaii
   5. Billie on Days of Our Lives and Emmanuelle in numerous movies.
Answer: Krista **Allen**
2. 10. Carrie Sharp on Baywatch Hawaii
   5. This extremely talented actress who has served as a muse to many appeared on the TV show "Thanks", but is best known for the extreme honor of being the 500th playmate in October 1995.
Answer: Alicia **Rickter**
3. 10. Hideki Tanaka on Baywatch Hawaii
   5. 2 words : Mr. Miyagi
Answer: Noriyuki "Pat" **Morita**

4. The US recently completed another census; given a population milestone name the year in which the census occurred FTP if you need additional information about the year it occurred you will receive 5 points.
1. 10. The US population breaks the 10 million barrier
   5. Baltimore and Ohio Railroad opened
Answer: **1830**
2. 10. The US population breaks the 100 million barrier
   5. The 19th amendment is ratified
Answer: **1920**
3. 10. The US population breaks the 200 million barrier
   5. 4 students are killed at Kent State
Answer: **1970**

5. Answer the following about some Internet protocols other than TCP/IP FTP each.

1. As opposed to TCP, this protocol is a connectionless, non-guaranteed delivery protocol which sends information in packets called datagrams. It is for the "talk" command, NFS, and trivial FTP (tftp).
Answer: **UDP** or **User Datagram Protocol**

2. This control protocol is used mainly by routers and hosts to send error messages or control information to other computers on a network.
Answer: **IMCP** or **Internet Control Message Protocol**

3. Perhaps the most notable use of the IMCP protocol is in this utility that sends a series of messages to a host in order to see whether it is alive and how long packets take to reach it. Using this utility to flood a network with packets is called smurfing.
Answer: **ping** or **packet internet groper**

6. Identify these historical thinkers from works on a 5-10-15 basis.

5. _Summa Theologica_
Answer: St. Thomas **Aquinas**

10. _On the First Principle_ and Commentaries on the _Sentences_ of Peter Lombard, left unfinished at his death in 1308.
Answer: John **Duns Scotus**

15. _On Learned Ignorance_, 1440
Answer: **Nicholas** of Cusa

7. Identify these directors from films on a 10-5 basis.

1. 10. _Red Roses_ and _Umberto D_
   5. _The Bicycle Thief_
Answer: Vittorio **De Sica**

2. 10. _While the City Sleeps_ and _The Return of Frank James_
   5. _Metropolis_ and _Fury_
Answer: Fritz **Lang**

3. 10. _This Happy Breed_ and _Ryan's Daughter_
   5. _Lawrence of Arabia_ and _Bridge on the River Kwai_
Answer: Sir David **Lean**

8. Given a disease, say whether it is caused by a virus, bacteria, fungus, protoza, or none of the above for five points each.

1. Gingivitis   Answer: **Bacteria**
2. Dengue Fever   Answer: **Virus**
3. Yaws   Answer: **Bacteria**
4. Hepatitis   Answer: **Virus**
5. ICH   Answer: **Fungus**
6. Popeye   Answer: **Fungus**

Note: I never said that these were human diseases, the last two were fish diseases.

9. Identify the following about Norse mythology for ten points each.

1. What eddic poem portrays a time of primeval chaos, followed by the birth of the giants, the gods, and finally humankind?
Answer: **Voluspa** Or **Prophecy of the Seeress**
2. What was the name of the yawning void?
Answer: **Ginnungagap**
3. What was the name of the great world tree that was perpetually attacked by Nidhogg?
Answer: **Yggdrasil**

10. Answer these questions about a certain crusade FTP each.
1. This crusade, led by Enrico Dandolo and Boniface of Montferrat, resulted in the capture of Constantinople in 1204.
Answer: **Fourth** crusade
2. This Greek emperor of the Byzantine Empire refused payments to the crusaders and demanded their withdrawal. The crusaders stormed the city and sacked it mercilessly, but the emperor managed to escape.
Answer: **Alexius V** Dukas
3. After the fall, a council of crusaders and Venetians made this man the first Latin Emperor of Constantinople in 1204.
Answer: **Baldwin I** of Flanders

11. Answer the following question about a well-known chain letter for the stated number of points.
5/15. The story attached to this chain letter was that a woman unexpectedly paid a large amount of money for a cookie recipe. The owner of the recipe has been ascribed to both a department store and chain store cookie vendor. 5 points for one 15 for both name them.
Answers: Mrs. **Fields** and **Neiman Marcus**
10. For 10 points name the unusual ingredient called for in the recipe.
Answer: **Oat flower**
5. Finally for 5 points what was the supposed cost of the recipe?
Answer: $**250**

12. Given a birthstone, name its corresponding month for ten points each.
1. Moonstone   Answer: **June**
2. Diamond   Answer: **April**
3. Sapphire   Answer: **September**

13. Identify the Silver Latin authors of these works FTP each.
1. Of the multitude that tried to copy Virgil, this man wrote one of the better works, _Pharsalia_, a ten-book epic on the civil war between Caesar and Pompey.
Answer: Marcus Annaeus **Lucan**us
2. This man's tragedies include _Thyestes_, _Troacles_, and _Phaedra_
Answer: Lucius Annaeus **Seneca**
3. His major work is the _Thebiad_, a sprawling epic on the Seven against Thebes. He also wrote _Silvae_, five books of poems.
Answer: Publius Papinius **Statius**

14. Identify these concepts from chemistry FTP each.

1. This empirical rule states that many liquids have approximately the same value for the molar entropy of vaporization, while highly structures liquids with significant intermolecular forces, like water, differ markedly from the norm.
Answer: **Trouton**'s rule

2. A generalization of Avogadro's law, it states that the osmotic pressure of a dissolved substance at a given temperature is the same as the gas pressure it would exert if it were an ideal gas occupying the same volume as that of the solution.
Answer: **van't Hoff**'s law

3. Monocyclic systems of trigonally hybridized atoms that contain 4n plus 2 pi-electrons, where n is a non-negative integer, exhibit aromatic character.
Answer: **Huckel**'s rule (prompt on 4n plus 2 rule)

15. Given a date on which they occur in 2001, name these holidays celebrated in Israel, for ten points, or for 5 points with another clue.
1. 10. April 26, 2001
   5. Israeli Independence Day
Answer: **Yom Ha'Atzma'Ut**
2. 10. March 8, 2001
   5. Book of Esther is read
Answer: **Purim**
3. 10. May 28, 2001
   5. Feast of Weeks
Answer: **Shavuot**

16. Give the Japanese author of the following works FTSNOP. Note: All titles are translations.
10. For 10 points, "Thousand Cranes"
Answer: Yasunari **Kawabata**
5. For 5 points, "The Silent Cry"
Answer: Kenzaburo **Oe**
15. For fifteen points, "The Roof Tile of Tempyo"
Answer: Yasishi **Inoue**

17. Given the six sub-stages of Piaget's sensorimotor period of development place them in the order they occur: Exercising reflexes, Developing schemes, Discovering procedures, Intentional behavior, Novelty and Exploration, Mental Representation
Answer: **Exercising reflexes** (0-1 months), **Developing schemes** (1-4 months), **Discovering procedures** (4-8 months), **Intentional behavior** (8-12 months), **Novelty and Exploration** (12-18 months), **Mental Representation** (18-24 months)
(Yes, they are in order)

18. For the stated number of points, name these celebrities who have appeared at WrestleMania.
1. These two women accompanied Shawn Michaels & Diesel to the ring for the main event at WrestleMania XI. Name them for 5 points each.
Answer: Jenny **McCarthy** and Pamela **Anderson**
2. FTP, He appeared in various roles at WrestleManiaIII and WrestleManiaIV including working as a ring announcer.

Answer: Bob **Uecker**

3. FTP, they performed at WrestleManiaV and their song "The Kings" was heard at WrestleMania2000.

Answer: **Run DMC**

19. 30-20-10 Name the author from works.

30. _Madmen and Specialists_, _The Swamp Dwellers_

20. _A Shuttle in the Crypt_, _The Interpreters_

10. _Kongi's Harvest_

Answer: Wole **Soyinka**

20. Identify these mack-daddy Polish composers FTPE.

10. Associated with George Sand for a long period of time, his works include the _Revolutionary Etude_ and the _Heroic Polonaise_.

Answer: Frederic **Chopin**

10. In 1860, this virtuoso violinist married the niece of the composer George Osborne, and later toured with Rubinstein. At one point court violinist for the tsar in Russia, he later grew ill and stayed at the house of Nadezdha von Meck. His works include two violin concertos, a _Fantase brilliante on themes from Gounod's Faust_, and the _Reminisces of San Francisco_.

Answer: Henryk **Wieniawski**

10. This man's most famous work is the opera _King Roger_, but his _Songs of a Fairy-Tale Princess_, Songs of the Infatuated Muezzin_, and the 1933 _Litany of the Virgin_ are also quite good.

Answer: Karol **Szymanowski**

21. Given the name of a "judge" name the court show he or she currently presides over for FPE and a bonus five for all correct.

1. Larry Elder	Answer: **Moral** Court
2. Mablean Ephriam	Answer: **Divorce** Court
3. Andrew Napolitano	Answer: **Power of Attorney**
4. Joseph Wapner	Answer: **Animal** Court
5. Jerry Sheindlin	Answer: **People's** Court

22. Arrange these leaders of Egypt in chronological order from earliest to latest for five points each.

Kamose, Khafre, Redjedef, Sesostris I, Snefru, Thutmose I

Answer:

A: **Snefru** (2680-2640 BC) ,**Redjedef** (2613-2603), **Khafre** (2603-2578 BC), **Sesostris** I (1962-1928 BC), **Kamose** (1576-1570 BC) **Thutmose I** (1524-1518 BC),

23. Identify theses types of materials which seemingly has nothing in common for ten points each.

1. This material is made from kaolin, a clay formed from decomposed granite. Its common name is China.

Answer: **Porcelain**

2. Made of many monomers, this material is often made into a resin. It contains the following organic group, $H_2C=CHCO$. They are impervious to water and have low densities. Due to these properties they are made structural materials, adhesives, textile fibers, and paints. The paint dry quickly without changing color and do not darken over time.

Answer: **Acrylic**

3. Its naturally occurring silver alloy is called electrum. The pure variety is the most malleable and ductile. It is also a good conductor of electricity and is one of the softest of all metals. What is this metal that will dissolve in aqua regia, a mixture of HCL and nitric acids?

Answer: **Gold**

-The connection between all of these is that these are all materials used in dentistry to make false teeth for dentures.

24. Answer the following questions regarding firsts in the XFL FTP each.

1. This former Western Michigan QB had the league's 1st TD run as a member of the Chicago Enforcers.

Answer: Tim **Lester**

2. As a member of the Orlando Rage, this former Charger, 49er, Buccaneer and Bronco threw the league's 1st TD pass.

Answer: Jeff **Brohm**

3. As the kicker for the Las Vegas Outlaws, his field goal scored the league's 1st points.

Answer: Paul **McCallum**

25. Answer the following questions about the recent shooting at the White House FTPE.

1. Name the gunman

Answer: Robert **Pickett**

2. Name the government agency that Pickett had worked for

Answer: **I**nternal **R**evenue **S**ervice

3. Name Pickett's hometown, where he worked as an accountant.

Answer: **Evansville**, Indiana