

IMSANITY 2

January 14, 2012

-ROUND 6-

Editors	Writers	
Noah Prince	Webster Guan	Megan Chen Brian Chien
Webster Guan Adam Kalinich	Adam Kalinich Sabrina Lato Nolan Maloney	Lael Costa Jacob Kronenberg
Nolan Maloney Eric Ordonez	Eric Ordonez Noah Prince	Ross Skelly
Bite ordenez	Saieesh Rao	

Tossups

(1) One of this artist's ink drawings is of a very scaly Rhinoceros. One of this man's paintings depicts two hands held together and is titled Praying Hands. Other works of his include one depicting a knight riding a horse while death holds up an hourglass and one depicting a series of scenes from the Book of Revelation, including four riders wielding various weapons; those works are Knight, Death, and the Devil and the Four Horsemen of the Apocalypse. For ten points, name this German artist most famous for his woodcuts and his engraving Melancolia I.

ANSWER: Albrecht Dürer

(2) This president strengthened the authority of the Interstate Commerce Commission and reformed the postal service. This president intervened in Nicaragua by supporting an insurgency and encouraged banks to invest in Latin American and Asian countries to create stability through commercial investments. He supported the Payne-Aldrich Tariff, and after it was alleged that his Secretary of Interior, Richard Ballinger, was working with timber interests, this president fired conservationist Gifford Pinchot. His administration's antitrust lawsuit against U.S. Steel embarrassed his predecessor, who returned from Europe to mount a primary challenge. For ten points, name this proponent of Dollar Diplomacy, the Teddy Roosevelt's handpicked successor who lost the Election of 1912 to Woodrow Wilson.

ANSWER: William Howard <u>Taft</u>

(3) In one story by this author, an insane man locks himself into his carriage after forgetting to tell his wife that he'd invited the general to dinner. While ill with fever, the main character of another work starts to curse a Very Important Person so vehemently it shocks his landlady. He wrote a story in which the title entity detaches from the main character and has adventures before reattaching approximately two weeks later. This author of Diary of a Madman and The Nose wrote about Chichikov's attempts to gain status by buying deceased serfs and Akaky Akakievich's obsession with the title article of clothing. For ten points, name this author of Dead Souls and The Overcoat.

ANSWER: Nikolai Gogol

(4) Calcitriol is a modified form of this compound, which can be used to treat patients whose parathyroid glands are not functioning properly. All of the forms of this vitamin are secosteroids, and an excess of this vitamin can lead to hypercalcemia. It is produced in the skin when 7-dehydrocholesterol reacts with ultraviolet light. Deficiency of this vitamin can lead to osteomalacia, or bone softening, and can also lead to osteoporisis in adults. Proper amounts of it also prevent rickets. For ten points, name this vitamin, whose levels depend on sunlight exposure and which can be obtained by drinking milk.

ANSWER: Vitamin \underline{D}

(5) One story about this figure details how he nearly ate the city of Alakpuri out of hunger before he was satiated with a handful of rice. A ten day festival named his Chaturthi results in an idol of him being submerged in the nearest body of water, and he is said to be the scribe to Sage Vyasa who dictated a poem without stopping; that poem is the Mahabharata. One story tells of how he won a race around the universe against his brother by circling his parents. He was created by his mother Parvati to guard her while bathing, but his father Shiva cut this figure's head off before replacing it. For ten points, name this mouse-riding remover of obstacles, the elephant-headed god of Hinduism.

ANSWER: Ganesha or Ganapathi

(6) One character in this work is reminded of his mother after he throws a lock of hair that he wrapped around his finger into the fire. One character with an "H" branded on his hand tries to pass off as the Spaniard Henry Butler; that character, George, would later escape to Canada with Eliza after shooting a hunter who would be reformed by Quakers, Tom Loker. The protagonist saves Eva St. Clare from drowning and does not reveal the locations of Cassy and Emmeline, who had escaped. George Shelby arrives too late to save the title slave from being whipped to death by Simon Legree in, for ten points, what anti-slavery novel written by Harriet Beecher Stowe?

ANSWER: <u>Uncle Tom's Cabin</u>, or, Life Among the Lowly

(7) This man asserted that the three main human constraints are that we live on Earth and nowhere else, none of us is the only member of the race, and that there are two sexes in his book What Life Should Mean to You. This man also classified people into ruling, getting, avoiding, and socially useful types through his categories of "styles of life". This man believed that eldest children were most likely to end up in jail or an asylum and that middle children had the lowest chance of developing neuroses. The founder of the field of individual psychology and the author of The Neurotic Constitution, for ten points, name this Austrian psychotherapist who created the idea of inferiority complexes.

ANSWER: Alfred Adler

(8) Materials with a negative value of this quantity can be used to create a superlens. This quantity can be expressed as the square root of the product of relative permittivity and relative permeability, as well as the square root of the dielectric constant. Its value in water is 1.33, and birefringent materials have multiple values for this quantity. Commonly used for optics in Fresnel's equations and Snell's Law, for ten points, name this quantity computed as the ratio of the speed of light in a medium to the speed of light in a vacuum, denoted by the letter n.

ANSWER: index of refraction or refractive index (prompt on "n" before mention)

(9) This opera opens with Marcello painting and his poet friend burning the pages of his latest drama to keep warm. That character falls in love with a seamstress searching for a lost key, and he sings of her cold hands and how he will warm them. In another scene, Musetta sells her earrings for medicine, and Colline sings a farewell to his overcoat before he pawns it to buy food. In the final scene, Rodolfo presents a sickly Mimí with the pink bonnet he bought her as a symbol of his love, but Mimí succumbs to her tuberculosis and dies in his arms. For ten points, name this Puccini opera about starving Parisian artists in the Latin Quarter.

ANSWER: La bohéme

(10) One ruler of this polity founded a new capital at Koh Ker, causing a civil war. One Buddhist ruler of this empire had the same name as its Hindu founder and was known for many building projects and reconquering the capital, Yasodharapura, from the Chams. In addition to Jayavarman VII, who built Ta Prohm, this empire's King Suryavarman II built its most famous city. This empire was founded by Jayavarman II and clashed with the kingdoms of Sukhothai, Ayutthaya, and Dai Viet. For ten points, name this Southeast Asian empire that built Angkor Wat located in modern-day Cambodia.

ANSWER: Khmer Empire (prompt on "Cambodia", accept Angkor before mentioned)

(11) A phenocryst is a noticeable crystal much larger than the grains found in the porphyritic variety of these rocks, which can be classified as aphanitic or phaneritic based on grain size. Komatiite is an example of an ultramafic kind of this rock, and they can also be classified as felsic based on silica, magnesium, and iron content. Diorite, an example of this kind of rock, is chemically equivalent to andesite, an extrusive rock. Plutons consist of this kind of rock, examples of which include batholiths and laccoliths. One kind of this rock is formed at divergent plate boundaries; that is basalt. For ten points, name this class of rocks which forms from cooling magma or lava.

ANSWER: igneous

(12) This man wrote the thesis "Literary Progeria in the Works of Flannery O'Connor and William Faulkner" as a Harvard senior. This man delivered the commencement speech at Harvard in 2000 and at Dartmouth in 2011. In 1993, this man began hosting a television show featuring such characters as the Gaseous Wiener and Triumph the Insult Comic Dog along with his sidekick Andy Richter. After 16 years on that show, Late Night, this man spent eight months hosting the Tonight Show before being replaced by Jay Leno. For ten points, name this comedian who, in 2010, began hosting an eponymous late-night show on TBS.

ANSWER: Conan Christopher O'Brien

(13) At the end of this work, one character re-states that "people don't do such things!" and that \(\sim \) same character pursues a triangular friendship with the central couple. A crucial point in this play sees the protagonist's husband come back from a bachelor's party with a manila \(\subseteq \) envelope that contains the book "The Domestic Industries of Brabant." The author of that manuscript tells his lover Thea Elvsted that he tore it into a thousand pieces before being killed by a pistol he borrowed from the title character. Eilert Lovborg and Judge Brack appear in, for ten points, what play ending with George Tesman's wife shooting herself in the temple written by Henrik Ibsen?

ANSWER: Hedda Gabler

(14) This group's ceremonies called sema are a way of practicing Dhikr in groups. The author of the Incoherence of the Philosophers, Al-Ghazali, defended this group, one of whose members wrote the Masnavi. Meditation in order to "take care of" the spiritual heart in this group's practices is known as muraqaba. Their attempts to achieve self-annihilation are called fana, and their name either comes from the word for purity or from the word for their wool clothing. One tariqa, or subgroup, of this sect is the Mevlevi Order that was founded by Rumi. That subgroup from Konya earned a nickname from their method of worship, the whirling dervishes. For ten points, name this mystic sect of Islam.

ANSWER: Sufism

(15) Before this battle started, a scout found the losers fixing each other's hair. This battle occurred after it was decided not to mount a stand at Vale of Tempe. The battle focused around a wall previously built by the Phocians. Though Thebes was neutral, four hundred of its hoplites came to help. This battle was supposed to take place at the same time as the Battle of Artemisium. The losers rejected an ultimatum to lay down weapons, responding "come and take them". Ephialtes betrayed the losing army on the third day of this battle, causing all but the rearguard to retreat. For ten points, name this battle in which Xerxes annihilated a force led by Leonidas I that included 300 Spartans.

ANSWER: Battle of Thermopylae

(16) The opening of his violin concerto written for Ferdinand David "gave [this composer] no peace". A brief visit to Staffa is reflected in one piece by chromatic woodwind slides to represent the huge waves of a coming storm; that piece depicting Fingal's Cave is the Hebrides Overture. In addition to reviving and rearranging Bach's St. Matthew Passion, one of his symphonies celebrates the Augsburg Confession, while a saltarello and tarentalla conclude his fourth one composed during stays in Rome and Naples. For ten points, identify this composer of the Scottish and Italian symphonies and a famous "Wedding March" from his incidental music to A Midsummer Night's Dream.

ANSWER: Felix Mendelssohn

(17) One form of this phenomenon involves the rapid movement of protons and shifting in pairs of bonding electrons, which establishes an equilibrium between the keto and enol forms of a compound. Another form of this phenomenon is regulated by enzymes that can knot or unwind DNA. The "optical" form of this arises from differences in stereochemistry, and the order in which atoms are connected determine the "structural" type. For ten points, name this phenomenon in which multiple molecules have the same chemical formula but differ in structure.

ANSWER: isomerism

(18) In one of author's works, one character repeats that "everyone belongs to everyone else" and the Malthusian belt is a popular fashion accessory. He wrote about his experiences with psychedelic drugs in his *The Doors of Perception*, and he also wrote about Will Farnaby in the utopian society of Pala. This author of *Island* also chronicled Walter Bidlake's affairs with women in *Point Counter Point*. In [his most famous work] Revisited, he argued that the means of controlling overpopulation will cause the world to approach the dystopian society of After Ford. For ten points, name this author who wrote about John the Savage and alpha plus Bernard Marx in Brave New World.

ANSWER: Aldous Huxley

(19) One of this man's advisors, Anthony Giddens, influenced this man's Third Way policy. This man made the Granita Pact after the death of John Smith. He negotiated the Good Friday Agreement with the Irish Republican Army. After adding "New" to his party's name, this man defeated John Major to become Prime Minister. He insisted that the purpose of one war was not regime change, but instead enforcing U.N. resolutions against chemical weapons, and assisted the United States in another war. For ten points, name this man who supported an invasion of Iraq, Prime Minister of the United Kingdom from 1997 to 2007.

ANSWER: Anthony Charles Lynton "Tony" Blair

(20) Rene Descartes called the problem of computing these entities "not only the most useful \(\Delta\) and most general problem in geometry that I know, but even that I have ever desired to know". Graphs obtained by subtracting these entities from a function contain a double-root. Newton's Method approximates zeroes of functions by determining where these entities intersect the x-axis. For circles, these lines are perpendicular to radii. Serving as the best linear approximation to a function, the slopes of these lines are computed using derivatives. For ten points, identify this type of line which touches a graph at a single point.

ANSWER: tangent lines (or tangents)

(21) In one of this author's plays, the title character sells her soul in order to save Aleel and Oona from starvation and damnation. This playwright of *The Countess Cathleen* proclaims that "The best lack all conviction while the worst/ Are full of passionate intensity" in one of his poems. He wrote that his "heart is sore" after hearing the "bell-beat" of the "nine and fifty" title creatures in his *The Wild Swans of Coole*. Another poem notes that "an aged man is but a paltry thing" and refers to the title location as "No country for old men." The line "Things fall apart; the centre cannot hold" was written by, for ten points, which Irish poet of *Sailing to Byzantium* and *The Second Coming*?

ANSWER: William Butler Yeats

Bonuses

(1) Name the following Shakespearean comedies for ten points each.

[10] Some of this comedy's characters include the brothers Don Pedro and Don John, but it results in Hero and Claudio, as well as Beatrice and Benedick, getting married.



Much Ado About Nothing ANSWER:

[10] Two servants named Dromio serve their respective twin brother masters, Antipholus of Ephesus and Antipholus of Syracuse, in this confusing play.

Comedy of Errors ANSWER:

[10] This comedy features the quote "some rise by sin, some by virtue fall," and features the duke Vincentio who is disguised as the Friar Lodowick.

ANSWER: Measure for Measure

(2) Answer some questions about the field of stoichiometry for ten points each:



[10] This term refers to the component in a chemical reaction that is entirely used up and defines how much of each product can be formed.



ANSWER: limiting reagent or reactant

[10] This is the SI unit of amount of a chemical substance. It is defined as the number of atoms in twelve grams of carbon-12.

ANSWER: mole

[10] This French Nobel laureate computed the number of atoms in a mole of carbon-12 in addition to explaining solar energy.

ANSWER: Jean-Baptiste Perrin

(3) Upon his return from Paris, he spawned a free adaptation of Nosferatu and Dracula into an awesome but unfortunately unfinished ballet about zombies. For ten points each:



[10] Identify this composer of Grohq, which later provided the source material of his Dance Symphony. He also wrote a clarinet concerto for Benny Goodman and An Outdoor Overture.

ANSWER: Aaron Copland

[10] The folk song "Bonaparte's Retreat" forms the basis of this Copland ballet's "Hoe-Down" movement. Other movements of this ballet include "Buckaroo Holiday" and "Saturday Night Waltz".

ANSWER: Rodeo

[10] A speech by Vice President Wallace inspired this short Copland piece scored for brass and percussion. Its title was settled with its March premiere date when Copland dedicated it in honor of the average American "at income tax time".

ANSWER: Fanfare for the Common Man

[10] This island north of Honshu is home to Japan's indigenous Ainu people. It is also the largest Japanese prefecture and has its capital and largest city at Sapporo.

ANSWER: Hokkaido

[10] This disputed island chain between Hokkaido and Russia's Kamchatka Peninsula separates the Sea of Okhotsk from the Pacific Ocean. Japan and Russia have never formally signed a truce since these were taken in World War II.

ANSWER: Kuril Islands

[10] The Aleutian Islands lie to the south of this sea that separates Alaska from Asia. Discovered by a Danish explorer surveying for Russia, a strait of the same name is thought to have once been a land bridge in the last ice age.

ANSWER: Bering Sea

(5) It grew out of the Teutonic Knights and eventually became Germany. For ten points each:

[10] Name this kingdom that was ruled by the Hohenzollerns that had its capital at Berlin.

ANSWER: Prussia

[10] This enlightened Prussian monarch fought Maria Theresa in the War of the Austrian Succession and the Seven Years War.

ANSWER: Frederick II or Frederick the Great (or Frederick IV of Brandenburg)

[10] Prussia was famous for the discipline of its army, which was developed by this father of Frederick the Great nicknamed the "Soldier King." He intervened in the Great Northern War and had the same name as his grandfather, nicknamed the "Great Elector."

ANSWER: Frederick William I (do not prompt on or accept "Frederick")

(6) Identify the following bands which released songs entitled *Somebody to Love* for ten points **a** each:

[10] This Canadian heartthrob sang "I, I don't need much/Just somebody to love" on his version of the song, a collaboration with Usher, which appeared on his album *My World* 2.0.

ANSWER: Justin Bieber

[10] Repeating the line "Can anybody find me somebody to love?", this British rock band's version of the song was written by lead singer Freddy Mercury.

ANSWER: Queen

[10] Grace Slick belted out the lines "Don't you want somebody to love?/Don't you need somebody to love?" on this American psychedelic band's version of the song from their album *Surrealistic Pillow*.

ANSWER: Jefferson Airplane

(7) Books from this country include *Madame Bovary* and *The Flowers of Evil*. For ten points each:

[10] Name this country, home to authors such as Gustave Flaubert and Charles Baudelaire.

 ∇ ANSWER: France

[10] Baudelaire began this movement when he published *The Flowers of Evil*. Jean Moreas was the first person to use this term to describe extremely metaphorical and indirect meanings.

ANSWER: Symbolism

[10] Another symbolist poet was this lover of Paul Verlaine, who wrote *The Drunken Boat* and *A Season in Hell*, but stopped writing by the time he was twenty-one.

ANSWER: Arthur Rimbaud

(8) This work claims that there were originally no kings, but God let the Jews have one even though it angered Him that they wanted one. For ten points each:

[10] Name this work that discusses the absurdity of a continent being governed by an island and urges for the Americans to declare independence.

ANSWER: Common Sense

[10] This author of *Common Sense* also wrote the famous line, "Tyranny, like hell, is not easily conquered" in his pamphlet *The Crisis*.

ANSWER: Thomas Paine

[10] Thomas Paine wrote *The Rights of Man* in response to this philosopher's *Reflections on the Revolution in France*. He also wrote *A Philosophical Inquiry into the Origin of Our Ideas of the Sublime and Beautiful*.

ANSWER: Edmund Burke

(9) Identify the following types of lines inside of triangles for ten points each:

[10] This word refers to a line connecting a vertex of a triangle to the opposite side. The term derives from the name of an Italian mathematician whose eponymous theorem deals with lengths induced by them.

ANSWER: Cevian [pronounced "CHAY-vee-uhn"]

[10] This type of Cevian passes through the centroid of the triangle, and ones emanating from different vertices cut each other two-thirds of the way to there opposite edges.

ANSWER: median

[10] This type of Cevian is perpendicular to its opposite side, and the intersection of the three of these is the triangle's orthocenter.

ANSWER: altitude

(10) Answer the following about the Hamesh Megillot, or five scrolls, for ten points each.

[10] The namesake of this book follows her mother-in-law back to Bethlehem and marries Boaz, becoming a great-grandmother of David.



ANSWER: Book of Ruth

[10] This other book describes Haman's plot against the Jews and how Moredechai and his titular niece, the wife of Ahashverosh, saved them. It is read on the Jewish holiday of Purim.

ANSWER: Book of Ester

[10] Another book, Lamentations, describes the destruction of this city. It is the capital of Israel and a holy city to Judaism, Christianity, and Islam.

ANSWER: Jerusalem

(11) Energy for a photon is equivalent to the product of Planck's constant and this quantity. For ten points each:



It is measured in Hertz.

ANSWER:

[10] Sound travels through gases and liquids as this kind of mechanical wave. Movement of the medium that these kind of waves travel in takes place in the same direction as the direction of wave travel.

ANSWER: longitudinal waves

frequency

[10] When waves are completely in phase with each other, they display the constructive variety of this effect, and when they are pi radians out of phase, they display the destructive variety. It is responsible for the beat phenomenon.

interference ANSWER:

(12) His The Milkmaid and The Astronomer both feature the titular figures basked in sunlight emanating from a window in the top left. For ten points each:

[10] Name this painter who depicted a woman in a blue bandanna set against a black background in his Girl With a Pearl Earring.

ANSWER: Johannes Vermeer (or Jan Vermeer)

[10] Vermeer painted his hometown in this work, which features two women chatting in the foreground while church spires pierce a cloudy sky in the background.

ANSWER: View of Delft

[10] Vermeer painted two of this type of work, which is usually concerned with representing abstract concepts or extended metaphors. Those works are titled [this] of the Catholic Faith and [this] of Art.

ANSWER: allegory (accept word forms)

(13) This character was really good at playing the game "Odds and Evens" against his friends when he was young, and he uses a newspaper article from the Cuvier to help him find an orangutan guilty of murder. For ten points each:



[10] Name this detective who has appeared in short stories like "The Mystery of Marie Roget" and "The Murders in the Rue Morgue."

ANSWER: C. Auguste Dupin

[10] This author, who created C. Auguste Dupin, wrote a poem about a "kingdom by the sea" in *Annabel Lee* and about a creature who repeated "nevermore," *The Raven*.

ANSWER: Edgar Allen Poe

[10] This Poe short story features Dupin leaving a snuff box at Minister D–'s mansion as an excuse to return the next day. This results in him finding the title object, something that Prefect G– and the police could not find.

ANSWER: The Purloined Letter

(14) Answer the following about the post-Civil War United States for ten points each.

[10] One issue of this man's presidency was figuring out what to do with a surplus of tariff money that the government had collected, for which he signed the Mongrel Tariff Act in 1883. He also oversaw the re-building of the U.S. Navy.

ANSWER: Chester Arthur

[10] This other law, also signed by Arthur in 1883, affirmed that government positions should be awarded to people based on merit instead of political connections.

ANSWER: Pendleton Civil Service Act

[10] The Pendleton Act arose from public support of Charles Guiteau, who assassinated this man, Arthur's predecessor, after his many unsuccessful attempts to secure the U.S. diplomat position in Paris. This President died eight days later in a beach house on the Jersey Shore.

ANSWER: James Garfield

(15) She turned Arethusa into a spring so that Arethusa could escape the river god Alpheus. For ten points each:

[10] Identify this Greek goddess of the hunt and childbirth, known for her chastity and vengeance.

ANSWER: Artemis

[10] One victim of Artemis's wrath was this hunter who accidentally stumbled upon her bathing. Artemis turned him into a stag, and he was torn apart by his own dogs.

ANSWER: Actaeon

[10] In the *Iliad*, in order to allow Agamemnon's ships to sail, Artemis demanded the sacrifice of this daughter of Agamemnon. After she was sacrificed, Artemis rescued her, and this girl worked as her priestess hunting companion.

ANSWER: <u>Iphigenia</u>

(16) Brownian motion describes this phenomenon on a molecular level. For ten points each:

[10] Name this process where molecules or atoms tend to move from area of high concentration to low concentration, which is used to exchange carbon dioxide and oxygen in the alveoli.

 ∇

ANSWER: diffusion

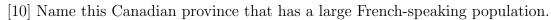
[10] Sometimes, cells must expend energy to move ions against their concentration gradients in this process. This process contrasts with its passive counterpart because it requires energy input.

ANSWER: active transport

[10] This process is used in filtration of water. It applies pressure to an impure water solution on one side of a membrane, which forces water through a membrane, and leaves contaminants on the other side, creating a pure solvent.

ANSWER: reverse osmosis (accept do not prompt on or accept "osmosis")

(17) In 2006, the Canadian parliament passed a bill saying that the people of this province "form a nation within a United Canada". For ten points each:



ANSWER: Quebec

[10] Both the French commander, Marquis de Montcalm, and the British commander, James Wolfe, died at this 1759 battle, sometimes called the Battle of Quebec. It was fought outside Quebec City during the French and Indian War.

ANSWER: Battle of the Plains of Abraham

[10] This Liberal Canadian Prime Minister from 1968 to 1984 used the War Measures Act to crack down against the Front de libération du Québec during the October Crisis. The Constitution Act of 1982 removed his country from British law.

ANSWER: Pierre Elliott Trudeau

(18) He supposedly muttered "Speak, damn you, speak!" while sculpting a statue of the prophet A Habakkuk. For ten points each:

[10] Name this sculptor of the Equestrian Monument of Gattamelata.

ANSWER: <u>Donatello</u> (or <u>Donato</u> di <u>Niccoló</u> di Betto Bardi)

[10] Donatello's most famous sculpture, the first freestanding nude since ancient times, is of this biblical figure who slayed Goliath.

ANSWER: David

[10] Donatello's \overline{David} was cast in this alloy of copper which contains tin as the main additive.

ANSWER: bronze

(19) The title character kills her brother Apsyrtus so that she and her lover could get away. For ten points each:

[10] Name this Greek play in which the titular lover of Jason sends Glauce a poisoned dress and kills her two children.

ANSWER: Medea

[10] Another work by the author of *Medea* describes Dionysus's return to Thebes to seek revenge on his family for not believing in the divinity of his mother's pregnancy.

ANSWER: The Bacchae

[10] Name this author of *Medea* and *The Bacchae*, a Greek poet who also wrote *Phoenecian Women* and *The Trojan Women*.

ANSWER: Euripides

(20) Answer the following about matrices for ten points each:

[10] This term refers to a matrix with the same number of rows and columns.

ANSWER: square matrix

[10] The cross product of two three-dimensional vectors is defined as this property of a three-by-three matrix. This property can be defined in general for square matrices in terms of cofactor expansion.

ANSWER: determinant

[10] Matrices whose determinant are zero have no multiplicative inverse and are called this.

ANSWER: singular

(21) Answer the following about some important Secretaries of War for ten points each:

10] This president was impeached by Radical Republicans for violating the Tenure of Office Act by removing Edwin Stanton as Secretary of War.

ANSWER: Andrew Johnson

[10] As Secretary of War, this man created the Bureau of Indian Affairs. He served as Vice-President under both John Quincy Adams and Andrew Jackson, but broke with Jackson after supporting Nullification. He called slavery a "positive good" on the Senate floor and opposed the Compromise of 1850.

ANSWER: John C. Calhoun

[10] This man served as Secretary of War twice under Taft and Roosevelt. Although he was never president, as Secretary of State, he issued a namesake doctrine in a note to China and Japan that declared that the United States would not recognize territory taken by force.

ANSWER: Henry Stimson