

New Trier Scobol Solo 2014

Round 10



1. Attractive young women in this culture were selected by the *apu panaka* to be raised for four years by women known as the *mamakuna*. Dominican Friar Vicente de Valverde converted a leader of this culture to Catholicism. This culture spread the Quechuan [KECH-wan] languages and the tracking of debts using knots of animal hair, or quipu [KEE-poo]. A civil war fought in this society was sparked by the death of Huayna [“WHY”-nah] Capac and included the defeat of Huáscar [WHASS-kar] by Atahualpa [ah-tah-WHAL-pah]. This civilization was conquered when Tupac Amaru was easily defeated by Francisco Pizarro. Name this formerly powerful empire that had its capital at Cuzco in Peru.

Answer: Incan empire [or Incas]

2. All of the properties of these objects depend upon mass and chemical composition, according to the Vogt–Russell theorem. Some examples of these objects are classified as T Tauri, which lose some of their luminosity while on the Hayashi track. The CNO cycle takes place inside these objects, producing alpha particles. The relationship between the absolute magnitude and spectral class of these objects is shown on the Hertzsprung–Russell diagram. These objects can be classified as giants or dwarfs, and the explosion of one of these objects can be a supernova. Name these objects, examples of which include Canopus, Sirius, and our Sun.

Answer: stars

3. Two of these entities labeled A and B are similar to each other if there exists another of these entities P such that B equals P -inverse times A times P . One of these entities is classified as skew-symmetric if it equals the opposite of its own transpose. Gauss–Jordan [YOR-dahn] elimination is used to put these entities into reduced row echelon form, which is used to solve systems of equations. Accounting for algebraic multiplicity, the product of the eigenvalues of one of these entities is equal to its determinant. Name these objects multiplied by pairing each rows of the left example with each column of the right example, creating another one of these rectangular arrangements of numbers.

Answer: matrixes [or matrices]

4. This author wrote about John Burley, who had helped murder Archbishop Sharpe and was harbored by Henry Morton, in his novel *Old Mortality*. One of his poems provided the lyrics to the song “Hail to the Chief”. One novel by this author is set up by a discussion between Wamba and Gurth, the latter of whom eventually leads an attack on Torquilstone. That novel features Locksley, who leads a gang through the forest and turns out to be Robin Hood. In that novel, this author wrote about a crusader who is the son of Cedric and who falls in love with Lady Rowena. Name this poet of *The Lady of the Lake* and author of *Ivanhoe*.

Answer: Sir Walter Scott

5. This person wrote that a scholar should be *Man Thinking* and can change the world to a place where each man “believes himself inspired by the Divine Soul which also inspires all men”. This person also wrote that other men are “lenses through which we read our own minds” in the “Uses of Great Men” essay, which opens his collection *Representative Men*. This person who delivered the speech “The American Scholar” also warned that “a foolish consistency is the hobgoblin of little minds” in his essay “Self-Reliance”. Name this Transcendentalist who was a close friend of Henry David Thoreau.

Answer: Ralph Waldo Emerson

6. In that poem, this poet expressed his contempt for his hair and shadow, exclaiming that he is “sick of being a man”. This author of “Walking Around” wrote about his feet being honored in “Ode to My Socks”. The speaker of another poem by this author states that these are the “last verses he will write for” his former lover. That poem begins with the lines “Tonight I can write the saddest lines.” A longer work by this poet implores “Arise to birth with me, my brother,” in “The Heights of Macchu Picchu”. Name this Chilean poet of *Canto General* [KAHN-toh hay-nay-RAHL] and *Twenty Love Poems and a Song of Despair*.

Answer: Pablo Neruda

7. In this country, U.S. Major General Harold Greene was shot in the back of the head in August 2014. This country is creating the role of chief executive officer following its disputed presidential election. That job will be taken by Abdullah Abdullah, who accepted it as part of his concession to Ashraf Ghani. Ghani is a Pashtun who favors peace talks with the insurgents in this country, who—like ISIS in Iraq and Syria—beheaded several people in September 2014. Ghani will begin those talks with the Taliban when he replaces Hamid Karzai. Name this country, from which U.S. and NATO troops are withdrawing at the end of a war started in 2001.

Answer: (Islamic Republic of) Afghanistan [or Jomhuri-ye Eslami-ye Afghanistan]

8. One work by this architect is a bell tower with a white inverted triangular top, located in Shiga Prefecture, Japan; he also designed the nearby Museum in the Mountain. This architect denies designing the windows of the south face of the Des Moines Art Center to spell his name when he worked on it during the 1960s. One of his works features a white circular theater balanced by the Foster Theatre over Lake Erie, with a glass pyramid leading up to them. He also designed the East Building, which is the modern side of the National Gallery of Art. Name this architect of the Rock and Roll Hall of Fame who also designed the Louvre Pyramid.

Answer: I(eoh) M(ing) Pei

9. Norman Davis and John Foster Dulles wrote Article 231 of this document, which was heavily criticized by Count von Brockdorff-Rantzau. This document set up an occupation of the Territory of the Saar Basin. It negated parts of the London Pact, and was followed by smaller documents named for Saint-Germain-en-Laye [sawn zhair-“main” en “lie”], Trianon [tree-ah-naw], and Sèvres [sev-ruh]. Russia received back some of the land that changed hands in the Treaty of Brest–Litovsk. This document established the League of Nations and was heavily influenced by the Fourteen Points. Name this peace treaty between the Allied Powers and Germany following World War I.

Answer: Treaty of Versailles [vair-sy]

10. James T. Mason created a topiary of this painting at Old Deaf School Park in Columbus, Ohio. A little girl in a white dress in the middle of this painting seems to stare at the viewer and walks beside a woman in a dress and red blouse. A mustachioed man in a bowler hat stares off into the distance on the left of this painting, next to another man smoking a pipe. A small part of the setting of this painting can be seen in its painter’s *Bathers at Asnières* [san-yair]. This painting, which is housed in the Art Institute of Chicago, features a woman holding a parasol in one hand and a leash latched onto a monkey on the other. Name this pointillist painting by Georges Seurat [zhorzh soo-rah].

Answer: *A Sunday Afternoon on the Island of La Grande Jatte* (, 1884) [or *Un dimanche après-midi à l’Île de la Grande Jatte* (, 1884); or *A Sunday on La Grande Jatte*; accept Isle in place of Island]

11. This value is responsible for steric [“STAIR”-ik] effects, which is why alkanes prefer staggered conformations over eclipsed ones. One trend in this value occurs due to $4f$ orbitals being quite penetrable. This value, which has a larger-than-expected drop along the lanthanide [LAAN-thuh-nyde] series, is often measured in angstroms. Due to the attraction between electrons and the nucleus, the addition of electrons tends to decrease this quantity. Shielding effects cause this quantity to increase as you go down the columns of the periodic table. Name this quantity related to how much space an atom takes up.

Answer: atomic radius [accept anything referring to the size or volume of an atom]

12. The Battle of Mylae in this series of conflicts saw a new naval power defeat an experienced one with the development of the corvus for boarding ships. The first of these conflicts ended with the Battle of the Aegates Islands, which in turn triggered a war between the losing side and its unpaid mercenaries. Archimedes died in second of these conflicts when Syracuse fell. The final of these conflicts was a two-year siege that likely didn't involve the winning side salting the earth of a North African city. Identify this series of wars fought between 264 and 146 BCE, most notable for Hannibal's invasion of Italy in the second of them.

Answer: Punic Wars [accept First Punic War]

13. This author wrote about Archbishop Geoffrey Clayton, who died the day after signing a letter refusing to follow a new law, in his book *Ah, but Your Land is Beautiful*. In another novel by this author, Sophie describes an affair between Stephanie and a police lieutenant Pieter van Vlaanderen. In another novel by this author, a priest tries to help his sister Gertrude, who is a prostitute. In that novel, James forgives the priest even though the priest's son Absalom has murdered James's son Arthur Jarvis. Name this author who wrote *Too Late the Phalarope* and depicted Stephen Kumalo in *Cry, the Beloved Country*.

Answer: Alan Paton

14. The Riverton Reclamation Project in this state cares for land that used to be part of the Wind River Indian Reservation; that project is responsible for Ocean Lake near the Owl Creek Mountains. This state is the site of Sweetwater River, which is near the route through the Rockies called South Pass. This state contains the Cathedral Group of mountains, including Mount Owen, and its highest mountain is Gannett Peak. In addition to containing Grand Teton National Park, this state is home to Old Faithful, a geyser in Yellowstone National Park. Name this home of Devils Tower located south of Montana, a state with its capital at Cheyenne.

Answer: Wyoming

15. Because pianist Walter Gieseking was uninterested in premiering this composer's *Piano Variations*, he premiered them himself, and much later he reworked them as *Orchestral Variations*. This person was able to get Benny Goodman to premier his *Concerto for Clarinet, Strings and Harp*. The folk song "El Palo Verde" can be heard in a work this composer wrote about a dance hall in Mexico City. During World War II, this person was inspired by a Henry Wallace speech to write *Fanfare for the Common Man*. Name this composer who also wrote the ballets *Billy the Kid*, *Appalachian Spring*, and *Rodeo*.

Answer: Aaron Copland

16. In one novel by this writer, the narrator befriends a man who lives in a twelve-foot-by-twelve-foot shack containing a rucksack, straw mats, and books of poetry and sutras. In addition to that book about Ray Smith and Japhy Ryder, he wrote a book in which the narrator spends a short time working in cotton fields near Sabinal, California. This person invented the character Cody Pomeray as alias for his friend Neal Cassady, who he also fictionalized as Dean Moriarty. Several of this author's works, including *Dharma Bums*, involve his adopted hometown, San Francisco. Name this Beat Generation writer of *On the Road*.

Answer: Jack Kerouac [or Jean-Louis Lebris de K  rouac]

17. This character warned Zeus not to marry Thetis, after which this character wore a stone and iron ring. This character warned his brother not to accept Pandora, but his brother did not listen. Pandora was given as a gift after this character killed two bulls and put all of their bones inside one body in order to fool Zeus. After using a fennel stalk to hide a gift, this character was punished by Zeus for 30,000 years until Heracles killed an eagle. That punishment was being chained to a rock while the eagle repeatedly ate his liver. Name this character who is sometimes credited for creating humanity, and who stole fire from Mount Olympus to give to humans.

Answer: Prometheus

18. The reversal of this quantity along with parity and time is symmetric. This quantity equals the permittivity of space times the integral of electric field over a closed surface. This quantity is divided by electric potential to calculate capacitance, and energy is divided by this quantity to calculate electric potential. The elementary amount of this quantity was found in the Millikan oil drop experiment, and J. J. Thomson measured its ratio to mass for electrons. Two values of this quantity are multiplied in Coulomb's law, and this quantity is measured in coulombs. Name this electric quantity that can be positive or negative.

Answer: electric charge

19. While playing tennis one day, this person was told to go to Robinson's drugstore, where he met with several businessmen led by George Rappleyea. In defense of this person, Dudley Field Malone said "The truth always wins and we are not afraid of it." Grafton Green overturned this person's penalty because it had been decided by a judge rather than a jury. This person's trial challenged the Butler Act. This person was prosecuted by William Jennings Bryan and defended by Clarence Darrow. Name this teacher whose trial in Dayton, Tennessee was nicknamed the "Monkey Trial" because he was accused of teaching evolution.

Answer: John (Thomas) Scopes

20. Upon fertilization, the levels of this element in the egg’s cytoplasm increase, possibly due to the action of phospholipase C. This element’s cation is released in response to stimulation of the T-tubules, and this element is released when ryanodine [ry-AA-noh-deen] receptors are activated. When blood levels of this element are low, parathyroid hormone helps stimulate release of this element. Vitamin D helps with absorption of this element in the small intestine, and this element’s phosphate makes up hydroxyapatite [hy-DRAHK-see-“appetite”]. Osteoclasts [AHSS-tee-oh-klasts] help increase blood levels of this element by breaking down a certain kind of tissue. Name this element that is found in milk and is a primary component of bone.

Answer: calcium [prompt on Ca]

- ^{TB}21. In May 2014, this company announced that it could not agree on profit-sharing with the French company Hachette. In October, Paul Krugman said this company “has too much power, and it uses that power in ways that hurt America,” and that this company’s dominant buyer position makes it a monopsonist. This company lost a lot of money trying to sell a phone with four cameras that produced a 3D effect, its Fire Phone. This company recently released the Voyage version of its e-book reader, the Kindle. Name this electronic commerce company originally started by Jeff Bezos as an online bookstore.

Answer: Amazon.com(, Inc).

- ^{TB}22. Thomas D. Garry’s cheer for this person became known as the “Voice from the Sewers” and was started after a message from this person was read by Alben Barkley. Lucy Mercer Rutherford convinced Elizabeth Shoumatoff to paint a picture of this person that went unfinished because of his death at the Little White House at Warm Springs, Georgia. This president created the so-called “alphabet agencies”, such as the Civilian Conservation Corps, Works Progress Administration, and Social Security Administration. His vice presidents were John Nance Garner, Henry A. Wallace, and Harry S. Truman. Name this president who implemented the New Deal and served four terms.

Answer: Franklin Delano Roosevelt [accept FDR; prompt on Roosevelt]

- ^{TB}23. Identify the body part that is taken from Yorick’s grave in the play *Hamlet*, appears with crossbones in a common symbol for poisons, and is the bony framework inside the head that surrounds the brain.

Answer: skull [or cranium]