

Technophobia IX Round 8

Berkeley B
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1 Berkeley B Tossups, Round 8

1. He raised the Stars and Stripes in Quiberon, and Admiral La Motte Piquet ordered a gun salute, the first time a foreign government recognized the flag. The French gave him the *Duc de Duras*, which he commanded in the North Sea of Famborough Head against the *Serapis*. For ten points, name this commander of the *Bon Homme Richard* who had not yet begun to fight.

Answer: John Paul Jones

2. This song is the at-bat music for both Arizona's Steve Sparks and Toronto's Reed Johnson. The performer's repertoire also includes Enrique Iglesias's "Bailamos" and Elton John's "Rocket Man," both of which he performed on the Ellen Degeneres show. After a performance at volleyball game at his school, the "artist" received a \$25,000 check from the Fuse music channel and a record offer. The song first aired on January 27, 2004, after which the performer, a yellow-backpack-toting civil engineering student at Berkeley, said "I already gave my best, and I have no regrets at all." For ten points, name this Ricky Martin song mangled by William Hung on "American Idol."

Answer: She Bangs

3. It was first achieved using magnets to select particles of a specific energy from a collimated beam, which then entered a resonant cavity. The absorption and emission coefficients are the same, and it cannot be achieved with two states, but can be achieved in three or more states. It can also be achieved by placing a gas between two mirrors and passing an electrical discharge through it. Basov and Prokhorov solved the problem of continuously achieving it, and shared the Nobel Prize in Physics with Townes in 1964. Consisting of placing electrons en masse into an excited state in order to have them decay and emit coherent radiation, for ten points, identify this technique at the basis of lasers and masers.

Answer: Population Inversion (accept "maser" before "process" is mentioned)

4. After being forced to leave his native country in 1964 due to his Communist affiliation, this man designed the headquarters of the French Communist Party in 1965. In Algeria, he designed the University of Constantine, but he got his start working on the Ministry of Public Instruction, designed by Le Corbusier. He collaborated again with Le Corbusier on the United Nations building in New York, but he is better known for his buildings in his home country, such as the Catedral Metropolitana, the Hotel Nacional, and the Congresso Nacional. For ten points, identify this Rio-born architect, best known for the modern design of Brasilia.

Answer: Oscar Neimeyer

5. His faction feuded with that of the nobles led by Isigoras, whose invitation of Cleomenes to depose this man backfired and led to this man's recall. His major reforms, known as isonomia, included the reorganization of the army into ten tribal regiments, each headed by a strategos and the partitioning of the city into 140 demes, as well replacing Solon's council of 400 by one of 500. His help was crucial in deposing Hippias and he is thought to be the first to have introduced ostracism into Greek political life. For ten points, identify this Alcmaeonid [ALK-MAY-O-NID] whose democratic reforms in Athens followed the tyranny of Peisistratus.

Answer: Cleisthenes

6. In its last chapter, this work predicts the death of technocracy, the humanization of the planner, and the rise of anticipatory democracy. Its fifth part suggests strategies for coping with the titular phenomenon, such as personal stability zones, enclaves of the past, and global space pageants,

and it has chapters with titles such as "The Fractured Family," "The Origins of Overchoice" and "Information: The Kinetic Image." All of these chapters support the author's main thesis, that this 800th lifetime of the human race is fundamentally different due to the ever-increasing acceleration of change. Defining its title phenomenon as mass disorientation brought on by rapid change, for ten points, identify this most famous book by Alvin Toffler.

Answer: Future Shock

7. One of the last lines spoken by the main character is "There are two kinds of people in the world: those with loaded guns, and those who dig. You dig." We meet the last of the titular characters as he is being thrown out of a window and his partnership with the first title character is the basis for their later antagonism. In the meantime, Angel Eyes is tracking Bill Carson, whom the other title characters stumble across as one of them is dragging the other around in the desert, and Carson reveals the location of the treasure to Blondie. After Blondie is nursed back to health at a monestary, he and Tuco Ramirez make their way to the cemetery, only to encounter Angel Eyes, played by Leon van Cleef, whom Blondie kills, having unloaded Tuco's guns the night before. Set chronologically before, but filmed after *A Fistful of Dollars* and *For a Few Dollars More*, for ten points, identify this 1966 Sergio Leone film starring Clint Eastwood as The Man With No Name.

Answer: The Good, the Bad, and the Ugly

8. This god's parentage, ironically, is uncertain. He is either the child of Apollo and a Muse, or of Aphrodite and Dionysus. His roles are usually small but influential; called upon to bless the nuptials of Orpheus and Eurydice, he brought bad omens in the form of a smoking torch and Eurydice fared badly. In literature, he is featured in *As You Like It* and *The Tempest*, doing his one duty. His brother is, appropriately, Priapus, since this god presides over the marriage feast, hymns, and ceremony. For ten points, name the Greek god for whom the tissue partially covering the vagina is named.

Answer: Hymen

9. At 21, he attempted suicide, shooting a bullet into his left lung, and suffered bouts of tuberculosis thereafter. He lived as a tramp for the next two years, meeting the derelicts, prostitutes, and thieves that would inform much of his later work. His first play, *The Smug Citizen*, sparked enough controversy that the theatre was surrounded by mounted Cossacks to discourage public demonstration. After taking part in the abortive 1905 revolution, he worked abroad for two decades, producing *Enemies* and *The Last Ones*. Born Aleksey Peshkov, he adopted a pseudonym meaning *the bitter one*; later, his hometown of Nizhny Novgorod adopted that name too. For ten points, name this playwright of *The Lower Depths*.

Answer: Maxim Gorki (accept early Peshkov early)

10. It never "knew love's sad satiety" because "shadows of annoyance never came near." "Waking or sleeping," it "of death must deem things more true and deep than' mortals dream. "Like a poet hidden in the light of thought," or "a high-born maiden in a palace tower," or "a glowworm golden in a dell of dew," or "a rose embowered in its own green leaves," it tells "of saddest thought' when singing "our sweetest songs." Though "bird thou never wert, that from Heaven, or near it," for ten points name this "blithe Spirit" to whom Percy Shelley composed a poem.

Answer: To a Skylark

11. This man's death marked the end of the Twantinsuyu, and before the incident which made him famous he had been engaged in a civil war with another son of Huayna Capac. While in captivity, he ordered the murder of that other son, a fact which was later used as a pretext to

execute him, and upon accepting baptism was allowed to be hanged rather than burned to death. After he was captured at Cajamarca, his ransom was to be a room full of gold and another full of silver, but Francisco Pizarro refused to honor the pledge and had this man killed. For ten points, identify this brother of Huascar, the last ruler of the Incan empire.

Answer: Atahualpa or Atabalipa

12. One character by this name is described in the book-within-a-book called *Meours*, written by Jacob Arnauti about his affair with her. In *Frankenstein*, it is the name of the maidservant accused of murdering Frankenstein's brother William, and another character of this name suffers great misfortune from denying the truth that God is evil. The first of the aforementioned women bearing this name finally leaves her husband Nessim and her lover Darley to live in a kibbutz in Palestine, while the third tells her story to Madame de Lonsange of her sexual exploitation under the name of Therese. For ten points, identify the titular character of the first book of the Alexandria Quartet who shares her name with the sister of Juliette, a character created by the Marquis de Sade.

Answer: Justine

13. Researchers at Columbia University showed that prayer increases the chances of success by 16% for women undergoing this procedure. It increases the risk of Beckwith-Wiedemann syndrome, caused by imprinting errors, when cells remain in culture too long. Blastocyst transfer could further increase its risk while at the same time increasing the chances of a successful implantation. For ten points, name this fertility procedure where an egg is fertilized outside of the body and subsequently implanted.

Answer: In vitro fertilization

14. The source of this phrase is a 1927 book by Harold Lamb, and in that book it arises during a conversation with a guard in Karakorum. In a better-known context, this phrase is spoken after a general laments that his sons will never understand him, just as a messenger brings the news that his armies are victorious. The content of this phrase is contrasted in the both cases with "the open steppe, the clear day, and a falcon on the wrist," but in the first instance also involves people falling at your feet and the taking of their horses and goods, while in the second, better-known case, those actions are omitted. Attributed to Genghis Khan and the most famous line from a 1982 screenplay by John Milius, for ten points, Conan, what is best in life?

Answer: to crush your enemies, see them driven before you, and to hear the lamentations

15. One consequence of this event was the Treaty of Shantung, by which China received Kiachow. Organized at the instigation of William Borah, the American delegation was led by Charles Evans Hughes and included Elihu Root and Henry Cabot Lodge. The Nine Power treaty concluded here ensured China's territorial integrity while endorsing the Open Door policy, and a supplement to its most important treaty forbade the use of poison gas as a weapon and outlined a series of rules for submarine warfare. However, its most famous treaty established the ratio of capital ships between Great Britain, the U.S., Japan, France, and Italy at 5 to 5 to 3 to 1.67 to 1.67. For ten points, identify this series of arms limitations talks which took place from December 13, 1921 until February 6, 1922 in the American capital.

Answer: Washington Naval Conference

16. The first West-East crossing was completed in 1942 by the ship *St. Roch*, which two years later completed the first northern, deep-water route. William Parry nearly found it in 1820, and won a Board of Longitude prize for crossing the 110th meridian. Knud Rasmussen became the first

to cross it by dogsled, in 1912. The first successful route began at Gjoa Haven and proceeded via Peel Sound, Roe Strait, and Queen Maud Gulf; today, ports of call along the route include Fond Inlet and Resolute. Jacques Cartier was the first to search for it, in 1534, and John Franklin was the first to prove its existence, in 1845. For ten points, name this trans-Canadian route first sailed by Roald Amundsen in 1905.

Answer: the Northwest Passage

17. If its storage goes haywire, many conditions result: Cori disease affects amylo-1,6-glucosidase; McArdle disease involves phosphorylate; Hers disease involves phosphofructokinase; Pompe disease involves alpha-1,4-glucosidase; and Von Gierke disease affects glucose-6-phosphate. Most of its storage diseases result in massive liver enlargement, which makes sense because, for ten points, this huge branched polymer of glucose residues is stored in the liver as a ready energy source.

Answer: Glycogen, prompt on "glucose" before "glucosidase"

18. The Gibbard-Satterthwaite theorem is a corollary of this result, which was proven in its namesake's PhD thesis and popularized in a 1951 book. It considers a function having five properties – unrestricted domain, non-imposition, monotonicity, independence of irrelevant alternatives, and non-dictatorship – and shows that no such function can exist. However, if the irrelevant alternatives exclude candidates in the Smith set, some Condorcet methods will meet all five criteria. FTP, name this theorem of a 1972 Nobel winner in Economics concerning the nonexistence of "fair" social choice functions.

Answer: Arrow's Impossibility Theorem/Paradox

19. The namesake of a Texas county, it features a sculpture of "The World's Largest Killer Bee." It's minor planet 944, whose strange orbit ranges between Mars and Saturn and tilts 43 degrees from the ecliptic. It's the name of Uruguayan poet Bartolome, author of "Cielitos". It's the name of a Mexican state with capital at Pachuca, named after a Mexican independence leader killed in 1811. From the Spanish for "son of something", it names the lowest grade of Spanish nobility allowed to use the prefix "don". For ten points, give this name, also shared by the title mustang in a 2004 movie about Frank Hopkins, Met outfielder Richard, and the Treaty of Guadalupe (BLANK).

Answer: Hidalgo

20. Those with an even number of carbon atoms have higher melting points than those with an odd number. If they are polysubstituted, their names are given by alphabetical order of the substituent names with the lowest possible numbering sequence. If they are disubstituted, cis and trans stereoisomers are formed. Also called carbocycles, for ten points name these hydrocarbons with general formula C_nH_{2n} containing single-bonded carbon atoms arranged in rings.

Answer: cyclic alkanes or cycloalkanes

21. Its offspring, known locally as "Anak", was born in June 1927, and has since grown at an average rate of five inches a week. In his "Catastrophe", David Keys argues that an AD 535 event here triggered climate changes that sent Europe into the Dark Ages. Along with Panjang, Sertung, and Polish Hat, it sat in the drowned caldera of a 60000-year-old explosion; it was topped by the summits of Rakata, Danan, and Perbuatan. Its most recent explosion was heard in Diego Garcia, nearly 3000 miles away, and created atmospheric effects recorded in many paintings, including perhaps Munch's "Scream". For ten points, name this island in the Sunda Strait of Indonesia which exploded in 1883.

Answer: Krakatoa or Krakatau

22. When he was six, this man's father was murdered in front of him, the victim of a vendetta killing; his brother was the victim of a contract killing more recently. On a happier note, he has six children, including quintuplets born in 2001. He was signed by Houston in 1991, then signed with the Mets in 1999, who surprised many when they put him on the postseason roster after hitting .161. Traded for Mark Bordick the next year, he played at six positions for his new team before his breakout 2003 season, in which he made the All-Star team. In 2004, they tried him at a seventh position, where he led the league in OBP and was fifth in OPS. For ten points, name this third baseman for the Orioles.

Answer: Melvin Mora

2 Berkeley B Bonuses, Round 8

1. Poems by Robert Herrick from lines. for ten points each.

- (a) Get up, get up for shame! the blooming morn / Upon her wings presents the god unshorn.

Answer: Corinna's Going a-Maying

- (b) I write of Hell; I sing, and ever shall / Of Heaven, –and hope to have it after all.

Answer: The Argument of His Book

- (c) Gather ye rose-buds while ye may: / Old Time is still a-flying

Answer: To the Virgins, to Make Much of Time

2. Answer some questions about a psychologist, for the stated number of points.

- (a) First, identify this German-born psychologist, best known for his eight stages of child development.

Answer: Erik Homburger Erikson

- (b) Erikson first outlined his eight stages in this book, which also includes an anthropological study of the Sioux and Yurok tribes and an analysis of the legend of Hitler's childhood.

Answer: Childhood and Society

- (c) In this 1958 book, Erikson applies psychoanalysis to determine how the founder of the Protestant Reformation was able to break with the Catholic establishment.

Answer: Young Man Luther

3. Identify these fourth century figures for ten points each.

- (a) He was persuaded not to sack Mantua by Leo I, but that didn't stop him from pillaging Aquileia and most of Germany.

Answer: Atilla the Hun

- (b) Hoping to escape an unwelcome marriage, this sister of Valentinian III sent Attila her ring along with a request for aid, which Attila interpreted as an offer of marriage.

Answer: Honorius

- (c) In 451, Attila was stopped by a combined Frankish and Visigothic force at this battle, the largest since Adrianople in 378.

Answer: Battle of Chalons or Catalunian Plains or Lacus Mauriacus

4. Identify the following about the electoral vote distributions of certain states:

- (a) FTPE, name the two states that allocate one electoral vote to a candidate for each Congressional district they win with the overall popular vote winner receiving the two electoral votes of the Senators.

Answer: Maine, Nebraska

- (b) For a final ten points, which state just voted on an amendment to its constitution to split the electoral votes based on the proportion of popular votes won by a presidential candidate?

Answer: Colorado

5. Answer the following about Stonehenge for ten points each.

- (a) Stonehenge is located on this large plain of England.

Answer: Salisbury

- (b) John Aubrey was the first to posit that these Celtic [KEHL - tehk] preists were the builders of Stonehenge.

Answer: Druids

- (c) The largest stones – as much as 50 tons each – give their name to the large outer circle. Name it for a final 10.

Answer: Sarsen circle

6. Identify the author from works on a 30-20-10 basis.

30 The autobiography *England Have My Bones* and the book on falconry, *Goshawk*

20 His most famous work includes *The Witch in the Wood* and *The Candle in the Wind*

10 That work is *The Once and Future King*

Answer: T(ERENCE) H(ANBURY) White

7. Did you hear that? That's the sound of the canon expanding. For ten points each, identify these American writers who could use a little more love, except they're dead.

- (a) The author of such works as *The Abortion: A Historical Romance*, *A Confederate General From Big Sur*, and *Revenge of the Lawn*, this author eulogized the Pacific Northwest and is best known for *In Watermelon Sugar* and *Trout Fishing in America*.

Answer: Richard Brautigan

- (b) Best known for his bizarre short stories collected in books like *Sadness* and *City Life*, this Houston writer is better known for *Snow White* and *The Dead Father*.

Answer: Donald Barthelme

- (c) Although she is best known for 1948's *The Lottery*, this writer also wrote such books as *The Haunting of Hill House* and *We Have Always Lived In the Castle*.

Answer: Shirley Jackson

8. Name these artists or groups who wrote songs about bad fathers on a 5-10-20-30 basis.

- (a) "That's Me Trying" from *Has Been*

Answer: William Shatner

- (b) "Father of Mine" from *So Much for the Afterglow*

Answer: Everclear

- (c) "Cats in the Cradle" from *Verities and Balderdash*

Answer: Harry Chapin

- (d) "Say it Ain't So" from their self-titled album.

Answer: Weezer

9. You probably know that Ichiro Suzuki set the all-time record for singles in a season, with 225. Answer the following for ten points each.

- (a) Before Ichiro broke it, this Hall-of-Famer held the singles record, slapping 206 in 1898.

Answer: Wee Willie Keeler

- (b) This Boston player, dubbed the “King of Dublin”, set the all-time doubles record with 67 in 1931, although there were grumbles that he occasionally stopped at second when he could have had a triple.

Answer: Earl Webb

- (c) This Pirate, nicknamed “Chief,” set the all-time record for triples in 1912 with a freak 36; the first and last names he went by are shared by a current laid-back movie star.

Answer: Owen Wilson

10. Identify the literary character from description for ten points each.

- (a) The emotionally crippled symbol of Protestant America, this insurance man gets conned by Faye Greener in Nathaniel West’s *Day of the Locust*.

Answer: Homer Simpson (Accept Either)

- (b) This father of 17 sons attempts to commit suicide by shooting himself in the chest, but survives and eventually dies while urinating under a tree in Macondo. His recollections of ice begin Gabriel Garcia Marquez’s *One Hundred Years of Solitude*.

Answer: Colonel Aureliano Buendia (both first and last name required)

- (c) After pretending that he is a land surveyor, this protagonist of Kafka’s *The Castle* with a single-letter name settles down in the village and begins searching for a way into the castle.

Answer: K

11. On the final alarm, General Polkan and King Dodon lead the spiritless army to battle, but they can’t attack because they don’t know where the enemy is, despite the signals of a bird provided by an Astrologer, and find a queen in a luxurious tent. for ten points each.

- (a) Name this fairy-tale opera based on a Pushkin story in which the titular bird later kills King Dodon for refusing to give his female war prize to the Astrologer.

Answer: The Golden Cockerel; or Zolotoy Petushok

- (b) May Night, The Legend of the Invisible City of Kitezh, The Snow Maiden, and the Hindu Song from Sadko are other works by this composer of The Golden Cockerel.

Answer: Nikolai Rimsky-Korsakov

- (c) This other fairy-tale opera by Rimsky-Korsakov contains the famous “Flight of the Bumble-Bee.”

Answer: The Tales of Tsar Saltan

12. For ten points each, name these men who came up with ideas on how to measure the speed of light.

- (a) This Danish astronomer made painstakingly accurate observations of the eclipses of Io and realized his errors were due to the speed of light. He estimated the speed of light to be $200,000 \frac{km}{s}$.

Answer: Ole (Christensen) Römer

- (b) This French astronomer used a rotating toothed wheel blocking reflected light from mirrors five miles apart to estimate the speed to be $313,300 \frac{km}{s}$.

Answer: Armand-Hippolyte-Louis Fizeau

- (c) This contemporary of Fizeau bounced light from a rotating mirror back to a stationary mirror to obtain a value of $299,796 \frac{km}{s}$; his technique was later improved by Michelson.
Answer: Jean-Bernard-Léon Foucault

13. Are you hungry for great film? For five points each and a bonus for all five, given a quote name and the actor who spoke the line, give the classic movie.

- (a) Alec Guinness: "The English have a great hunger for desolate places."

Answer: Lawrence of Arabia

- (b) Humphrey Bogart: "Just listen to this stomach of mine. Way it sounds, you'd think I had a hyena inside me."

Answer: African Queen

- (c) Walter Connolly: "Hunger strike, eh? How long has this been going on?"

Answer: It Happened One Night

- (d) Vivien Leigh: "As God is my witness, I'll never be hungry again."

Answer: Gone with the Wind

- (e) Charles Macaulay: "Doomed to a living hell . . . a hunger . . . wild animal gnawing hunger! You will starve for an eternity!"

Answer: Blacula

14. Answer the following about a mathematical transformation for ten points each.

- (a) For a function f , this is defined to be the integral with respect to x of $f(x)$ times e to $-i2\pi xs$.

Answer: Fourier Transform (accept "Fourier Series" if they also mention something about infinity)

- (b) This result states that the square of the L_2 norm of f is equal to the sum of the squares of its Fourier coefficients.

Answer: Plancherel identity

- (c) This result states that the L_2 inner product of two functions is equal to the inner product of their Fourier series.

Answer: Parseval identity

15. Identify the mythological weapons for ten points each.

- (a) Dying of his wounds after holding the pass at Roncesvalles, Roland attempts to destroy this weapon, his sword.

Answer: Durendal

- (b) Given to its wielder by Skatha, this is the spear of Cuchulain.

Answer: Gae Bolg

- (c) Adorned with the head of the Medusa, this is Athena's shield.

Answer: Aegis

16. If there's one group of people Stalin truly loved, it was the Jews. Identify these things having to do with Stalin and Jews for ten points each.

- (a) Shortly before he died, Stalin accused nine Jewish men of attempting to poison the Soviet leadership. What was the name given to this incident, indicative of the men's professions?

Answer: The Doctors' Plot or the affair of the doctors or logical equivalents; in Russian, delo vrachey

- (b) A Jew from Odessa, he wrote about his exploits during the Russian Civil War in *Red Calvary*, but despite the protection of Gorki, this man mysteriously disappeared in 1941.

Answer: Isaak Emmanuilovich Babel

- (c) If there's one Jew Stalin loved more than any other, it was this man, whom he had assassinated in Mexico in 1940.

Answer: Leon Trotsky or Lev Davidovich Bronstein

17. Answer these questions about collections of freaks for ten points each.

- (a) The famous 1932 movie "Freaks" was directed by this man, who also directed the original "Dracula" starring Bela Lugosi.

Answer: Tod Browning

- (b) This novel by Katherine Dunn concerns the Binewskis, a family of chemically induced carnival freaks.

Answer: Geek Love: a novel

- (c) This short-lived NBC drama by Judd Apatow centered on the Weir family's children, Sam and Lindsay, and their freinds at McKinley High.

Answer: Freaks and Geeks

18. Answer the following about the chemistry of water. for ten points each.

- (a) Water is ionized to hydroxide ion and hydrogen ion, but protons exist only in this form in solution, a H_3O^+ cation.

Answer: hydronium ion

- (b) With value $10^{-14} M^2$, this constant is the concentration of water at 25 degrees C times the equilibrium constant, or alternatively, the product of hydrogen and hydroxide concentrations.

Answer: ion product of water or K_w or water constant

- (c) The concentration term should strictly speaking be expressed as this value, the effective concentration of the species in nonideal solutions.

Answer: activity

19. Name these procedures based on interactions with antigens for the stated number of points.

- (a) For five, Kohler and Milstein produced this type of antibodies specific for a single epitope produced from identical B lymphocytes.

Answer: Monoclonal antibodies

- (b) This technique for screening antigens given by a 5-letter abbreviation coats surface with the antigens, blocks unoccupied sites with casein, treats with primary antibodies, and adds substrates to enzyme-bound secondary antibodies. Five points per letter or word.

Answer: Enzyme Linked Immuno Sorbent Assay

20. Identify these German painters, for ten points each.

- (a) This painter's claim to fame is his altarpiece for the monastery church of the Order of St. Anthony in Isenheim.

Answer: Matthias Grunewald (also known as Matthias Gothart Nithart)

- (b) Although primarily a landscape painter, this man is best known for a painting featuring hundreds of figures depicting the triumph of Alexander the Great at Issus.

Answer: Albrecht Altdorfer

- (c) This main exponent of German Romanticism is known for such landscape works as "Graveyard in the Snow" and "The Polar Sea."

Answer: Caspar David Friedrich

21. Answer these questions about Hungarian history, for ten points each.

- (a) Founded by its namesake in 907 C.E., this dynasty controlled Hungary until it died out in 1301.

Answer: Arpad dynasty

- (b) This greatest ruler of the Arpad dynasty reigned from 997 to 1308 and was crowned with a crown sent by the pope. He was canonized in 1083 and shares his name with the first Christian martyr.

Answer: Saint Stephen I

- (c) The Hungarians were decisively defeated in 955 by Otto I at this battle, which the Hungarians, despite outnumbering the Germans 5 to 1, lost because they dismounted to loot the wagon trains.

Answer: Battle of Laechfeld (also known as the Battle of Augsburg)

22. Given two American cities, name the common river on a 5-10-20-30 basis.

- (a) Bonneville and Astoria

Answer: Columbia

- (b) Keokuk and Hannibal

Answer: Mississippi

- (c) Rensselaer and Poughkeepsie

Answer: Hudson

- (d) Kearney, and Grand Island

Answer: Platte (don't accept North/South Platte)