1. According to the Curse of 1940, this object was desecrated by having the mortgage of Madison Square Garden burned in it. In July 2013, Justin Bieber stood on a team's logo while taking a picture of this object. A tradition for this trophy is that the members of the winning team drink (*) champagne out of its bowl. It is named for the Governor-General of Canada who donated it in 1892. For 10 points, name this trophy awarded every year to the winner of the playoffs of the National Hockey League. ANSWER: Stanley Cup

023-14-102-08101
BONUS: What Greek king, the father of Alexander the Great, was assassinated in 336 BCE by Pausanias (pow-SAY-nee-us) of Orestis?
ANSWER: Philip II of Macedon [prompt on Philip]
2. A city in this state was the first to implement the kindergarten through twelfth grade education system. At a convention in this state, Sojourner Truth delivered the "Ain't I a Woman" speech. It's not Kentucky, but a poet from this state wrote in his poem "Sympathy" that "I know why the caged bird sings.' In this home state of Paul Lawrence Dunbar, I.M. Pei built the (*) Rock and Roll Hall of Fame. The Pro Football Hall of Fame is located in this state's city of Canton. This state's largest cities include Cincinnati and Cleveland. For 10 points, name this "Buckeye state."
ANSWER: Ohio
186-14-102-08102
BONUS: What Heian (HEY-yon)-era woman wrote the classic Japanese novel The Tale of Genji? ANSWER: Lady Murasaki [or Murasaki Shikibu]

014-14-102-0810-11
3. Kevin McKenzie created a danced prologue specifically to show the origin of this creature. Riccardo Drigo's score includes a "grand pas de deux" for this creature, which ceases to exist after two lovers commit suicide together and are seen ascending to heaven. A man freezes after aiming his crossbow at this creature, which in some productions has an evil (*) "black" counterpart. Von Rothbart's sorcery caused Odette to transform into this creature. For 10 points, name this title animal of a Tchaikovsky ballet.
ANSWER: the swan from Swan Lake
020-14-102-08103
BONUS: What blue-collar labor union was led by the disappearing Jimmy Hoffa after it was expelled from the AFL-CIO?
ANSWER: International Brotherhood of Teamsters, Chauffeurs, Warehousemen and Helpers of America [or IBT]
4. This philosophical school was referred to as a "new name for some old ways of thinking" in a book written by the author of "What is an Emotion?' Many proponents of it were members of the Metaphysical Club. Texts written by proponents of this school include (*) "How to Make Our Ideas Clear," The Varieties of Religious Experience, and Democracy and Education. For 10 points, name this philosophical school practiced by Charles Sanders Peirce (PURSE), William James, and John Dewey, which values practical action.
ANSWER: pragmatism

BONUS: What 1813 battle, also known as the Battle of the Nations, pitted Napoleon Bonaparte's alliance against Russia, Austria, Prussia, and Sweden?
ANSWER: Battle of Leipzig
015-14-102-0810-11
5. Napoleon Hill wrote the self-help book The Laws of Success on the advice of this man. His own writings include The Gospel of Wealth. His partner Henry Clay Frick hired Pinkerton troops to attack striking workers at one of his plants in (*) Homestead, Pennsylvania. The world's first billion-dollar corporation was formed when he sold his company to J.P. Morgan to create U.S. Steel. For 10 points, name this Scottish-American steel manufacturer.
ANSWER: Andrew Carnegie
121-14-102-08105
BONUS: What molecule is released from the pars compacta of the substantia nigra, whose degeneration causes Parkinson's disease?
ANSWER: dopamine
048-14-102-0810-11
6. In Washington state, John Braun introduced a measure to stop individual cities from changing this value after residents of SeaTac voted in 2013 to raise it. In a December 2013, speech, Barack Obama claimed this value in real terms was "below where it was when Harry Truman was in office." (*) Fast Food Forward aims to increase this value for fast food workers. Thirteen states increased this value at the start of 2014. For 10 points, name this value that, at the federal level, is currently set at seven dollars and twenty-five cents an hour.
ANSWER: minimum wage
023-14-102-08106
BONUS: Name the folds found in the inner membrane of mitochondria which surround the matrix. ANSWER: cristae
7. One of this author's novels was adapted into a wildly successful Broadway play by Jack Kirkland. This man collaborated with photographer Margaret Bourke-White on the book You Have Seen Their Faces. Characters in his most famous novel include Ellie May, a girl with a cleft lip, and Grandma (*) Lester, whom Dude runs over with his car. For 10 points, name this Southern novelist of God's Little Acre and Tobacco Road.
ANSWER: Erskine Caldwell
014-14-102-08107
BONUS: What American painted Automat and Nighthawks?
ANSWER: Edward Hopper
8. This woman included the refrain "Go, go, go, seek some other where, importune me no more," in her poem "When I Was Fair and Young." This woman was depicted as Gloriana, the title character of an allegorical epic poem by Edmund Spenser. This woman's expressed desire to see Sir John (*) Falstaff fall in love was the apocryphal origin of The Merry Wives of Windsor. For 10 points, name this monarch during whose reign Shakespeare wrote most of his plays.
ANSWER: Elizabeth I [prompt on Elizabeth]
014-14-102-08108
BONUS: The Democratic-Republican Party partly coalesced from voters enraged at what treaty, which settled outstanding issues from the Revolution with Britain in 1794 ?
ANSWER: Jay Treaty [or Jay's Treaty]

## SET A:

1. BONUS: A character who can shatter glass with his voice and decides to stop growing after receiving the title instrument on his birthday is the protagonist of what author's novel The Tin Drum?
ANSWER: Gunter Grass
227-14-102-0810-12
2. BONUS: Identify the Washington Irving short story in which Ichabod Crane is haunted by the Headless Horseman.
ANSWER: "The Legend of Sleepy Hollow"
014-14-102-0810-12
3. BONUS: This is a 30 -second calculation question. Triangle ACF is an isosceles right triangle with leg length 8 units. What is the distance between the circumcenter and the orthocenter of ACF? Express your answer in simplest radical form.
ANSWER: $\underline{4}$ square root of $\underline{\mathbf{2}}$ units
003-14-102-0810-12
4. BONUS: In the epics of Homer, what goddess is given the epithets "Pallas" and "gray-eyed"? ANSWER: Athena

## SET B:

1. BONUS: What eighteenth-century British empiricist denied the existence of miracles in a section of his treatise An Enquiry Concerning Human Understanding?
ANSWER: David Hume
2. BONUS: This is a 20 -second calculation question. Convert the polar coordinates " $\mathrm{r}=4$, theta $=3$ pi over 4 " to rectangular coordinates.
ANSWER: ( $\underline{\mathbf{2}}$ times the square $\underline{\operatorname{root}}$ of $\underline{\mathbf{2}}, \underline{2}$ times the square $\underline{\operatorname{root}}$ of $\underline{2}$ ) [or $\mathrm{x}=\underline{\mathbf{- 2} \operatorname{root} \mathbf{2}}, \mathrm{y}=\underline{\mathbf{2} \operatorname{root} \mathbf{2}}$ ]
3. BONUS: Madame Forestier (for-ES-tee-ay) tells Mathilde Loisel (lwah-ZEL) that the title piece of jewelry was fake in what French author's short story "The Necklace?"
ANSWER: Guy de Maupassant (GEE deh MOE-puh-sahnt)
4. BONUS: What state is the site of Omaha and is known as the Cornhusker state?

ANSWER: Nebraska
9. Hannah Hoch painted the "Cut of a Kitchen Knife" from this art movement through a "Beer Belly Cultural Epoch.' Jean Arp, also known as Hans Arp, was a member of this movement. Tristan Tzara's manifestos laid its groundwork. Another artist in this movement wrote (*) "R. Mutt" on a urinal and titled it Fountain, an example of one of his readymades. According to one theory, this artistic movement got its name randomly from the French word for "hobbyhorse." For 10 points, name this anti-art movement embraced by Marcel Duchamp.
ANSWER: Dadaism
190-14-102-08109
BONUS: What American businessman founded the University of Chicago with money he earned from creating the Standard Oil Company?
ANSWER: John D. Rockefeller
015-14-102-0810-11
10. In this novel, Arina, a member of the aristocracy, devotedly believes in superstitions, while the feminist Kukshina plays host to Sitnikov and his two friends. The former lover of Princess X, Paul, questions the upcoming liberation of the serfs, and his brother Nikolai marries Fenechka (fuh-NESH-kuh) at this novel's end. This novel's protagonists are a young (*) student from St. Petersburg and his friend, the first literary nihilist. For 10 points, name this novel about Arkady Kirsanov and Bazarov, written by Ivan Turgenev (tur-GAIN-ev).
ANSWER: Fathers and Sons [or Otcy i Deti]
192-14-102-08110
BONUS: After Steven Rogers volunteered for Project: Rebirth, he became what early superhero of the Marvel Universe?
ANSWER: Captain America
002-14-102-0810-11
11. If a function satisfies Laplace's (luh-PLOSS-iz) equation, then its mean value on the surface of this figure equals its value at this figure's center. The gravitational force exerted by a shell of this shape on a particle inside the shell is always zero. The constant of proportionality for moment of inertia of a (*) hollow one of these is two-thirds, while a solid one has constant two-fifths. This is the shape of the orbital with azimuthal quantum number zero, known as the s orbital. For 10 points, identify this shape which has volume four-thirds pi r-cubed.
ANSWER: spheres [or word forms, such as spherical]
233-14-102-08111
BONUS: The electron transport chain produces a molecule that contains three anions named for what second element in the nitrogen family?
ANSWER: phosphorus [or $\underline{\mathbf{P}}$ ]
12. These compounds can be chlorinated using $\mathrm{S}-\mathrm{O}-\mathrm{Cl} 2$ or brominated using $\mathrm{P}-\mathrm{Br}$ 3. Both PCC and the Jones reagent oxidize these compounds to ketones. Though not amines (AA-meenz), the number of carbon atoms attached to their defining functional group determines whether they are (*) primary, secondary, or tertiary. An example of these compounds is generated along with carbon dioxide when yeast enzymes consume glucose. These compounds have a hydroxyl group bounded to carbon atom. For 10 points, name these compounds whose examples include methanol, ethanol, and a type of isopropyl. ANSWER: alcohols

BONUS: What Romanization system for Mandarin Chinese replaced the older Wade-Giles system and is widely used today?
ANSWER: Pinyin
015-14-102-0810-11
13. The tat protein in HIV patients greatly increases the rate of this process, which is also enhanced in the presence of acetyl transferases. Although not methylation, this process is initiated from CpG islands in some eukaryotes. This process does not occur from $\left({ }^{*}\right)$ Barr bodies because they have been highly methylated. The product of this process is capped with methyl-guanosine and gets a poly-A tail. Retroviruses can do this process in reverse. This process is initiated at a promoter and is mostly catalyzed by RNA polymerase. For 10 points, name this process of making messenger RNAs from DNA. ANSWER: transcription [do not accept "translation"]

190-14-102-08113
BONUS: Prior to Pete Carroll's victory in 2014 with the Seahawks, the only coaches to win college and pro national championships both did so with what NFL team, after it fired longtime head coach Tom Landry? ANSWER: Dallas Cowboys [or Dallas Cowboys]

052-14-102-0810-11
14. This man turned down an opportunity to be the first president of Texas A\&M University. During the Battle of Monterrey, he led a successful charge on the La Teneria fort. This Secretary of War in Franklin Pierce's cabinet was captured while Given Campbell attempted to help him escape. His vice-president gave the $\left(^{*}\right)$ "Cornerstone" speech and was Alexander Stephens. This man ordered Pierre Beauregard to attack Fort Sumter and gave Robert E. Lee command of the Army of Northern Virginia. For 10 points, name this only president of the Confederate States of America.
ANSWER: Jefferson Finis Davis
186-14-102-08114
BONUS: What simple device used to simulate computer algorithms consists of a strip of tape and a read-write head?
ANSWER: Turing machine
15. This politician's 1971 election bid was grounded in a slogan for "eliminating poverty." She put her son in charge of an aggressive family planning program which controversially included sterilization quotas. She died en route to an interview with Peter Ustinov. Her authorization of Operation (*) Blue Star, which was an attack on the Golden Temple of Amritsar, ultimately led to her assassination by her own Sikh bodyguards, after which she was succeeded by her son Rajiv. For 10 points, identify this daughter of Jawaharlal (jah-WAH-hur-lol) Nehru and first female prime minister of India. ANSWER: Indira Priyadarshini Gandhi [prompt on Gandhi]

BONUS: What Italian demonstrated his mastery of tenebrism (TEN-uh-briz-um) with the paintings The Calling of St. Matthew and The Conversion of St. Paul?
ANSWER: Caravaggio [or Michelangelo Merisi o Amerighi da Caravaggio]
16. Every entire function can be written as a power series with this property on the complex plane. A complete metric space is one where Cauchy sequences have this property. The Weierstrass M-test can show whether something has the uniform type of this property. Geometric series will (*) always have this property if the common ratio has absolute value between zero and one, and the harmonic series does not possess it. For 10 points, name this opposite of divergence.
ANSWER: convergence [or has a limit]

BONUS: This is a 20-second calculation question. If " f of $\mathrm{x}=3 \mathrm{x}+2$ ", then what is " f -inverse of -4 "? ANSWER: $\underline{\underline{\mathbf{2}}}$
hsapq
17. A battle fought near this city shortened the reign of a native monarch, causing the bestowing of the nickname ''The Winter King." In this city, Frederick V was crowned a year before losing outside its walls at White Mountain to Holy Roman Emperor Ferdinand II. Protestants in this city said that a pile of $\left(^{*}\right)$ manure saved two regents and a secretary after they fell from its chancellery tower in 1618. For 10 points, name this historical capital of Bohemia, where the Thirty Years's War was sparked by a defenestration.
ANSWER: Prague [or Praha]
104-14-102-08117
BONUS: What name is given to the final group of the periodic table, which includes krypton and xenon? ANSWER: noble gases [or group 18]

