1. **This author wrote a story in which Mrs. Pike recognizes Mr. Petrie as a fugitive rapist from California. This author of "Petrified Man" also created a character named Sonny, who helps the protagonist after his car falls in a ravine. Phoenix Jackson travels to Natchez in order to pick up medicine for her grandson in this author's "A (*)** Worn Path," and she wrote a story in which Stella-Rondo brings home Shirley T. on Independence Day. For 10 points, name this American author of "Why I Live at the P.O."
ANSWER: Eudora **Welty**

227-14-102-13101

BONUS: RSA is an example of a public-key system used to accomplish what process?
ANSWER: **encryption**

014-14-102-1310-11

2. **Invariants named for these constructs are true after every time they are executed. A type of them whose name is prefixed with "do" checks the termination condition at the end, rather than the beginning. One can go to the beginning of one of them with the "continue" command, or leave one entirely with the (*)** "break" command. These constructs come in "while" and "for" types. For 10 points, name these repeating pieces of code, an "infinite" one of which will cause a program to run forever.
ANSWER: **loop**s [or specific answers, such as **for loop**s or **while loop**s]

132-14-102-13102

BONUS: What sixth-century Pope, known as "the Great," is the namesake of a type of chant?
ANSWER: **Gregory** the Great [or **Gregory** I]

014-14-102-1310-11

3. **After the Sharpeville Massacre, this man became the commander of the newly formed Spear of the Nation. During the Rivonia Trial, he gave the "I am Prepared to Die" speech. This leader established the Truth and Reconciliation Commission after sharing the Nobel Peace Prize with F.W. (*)** de Klerk. He spent eighteen years imprisoned on Robben Island before winning a 1994 election that was the first to allow black voters. For 10 points, name this president of South Africa who helped to end apartheid.
ANSWER: Nelson Rolihlahla **Mandela**

023-14-102-13103

BONUS: Okonkwo is the protagonist of what Chinua Achebe novel about Umuofia (OOM-woh-FEE-uh)?
ANSWER: *Things Fall Apart*

014-14-102-1310-11

4. **The text of the Monroe Doctrine was mainly authored by this man while he was Secretary of State. This man won an election that included William Crawford as a candidate. He is the only President to follow his time in office by serving in the House of Representatives. Henry Clay agreed to serve as the Secretary of (*)** State for this President, in return for swinging the election of 1824. For 10 points, name this man who used the "Corrupt Bargain" to defeat Andrew Jackson and was the first son of a President to hold the office.
ANSWER: John **Q**uincy **Adams** [prompt on **Adams**; do not accept "John Adams"]

023-14-102-13104

BONUS: In May of 2013, mayor Dave Bing announced that what American city was forced to declare bankruptcy?
ANSWER: **Detroit**

5. **This MLB team's ballpark has stands in left field called the Crawford Boxes. During the 1990s and early 2000s, this team's lineup included the "Killer Bs," comprised of Derek Bell, Lance Berkman, Craig Biggio, and Jeff Bagwell. Tal's Hill and a train on a track above left field are features of this team's (*)** Minute Maid Park. In 2013, this team drafted Mark Appel first overall and moved into the American League. For 10 points, name this MLB team that plays the Lone Star Series against its in-state rival Texas Rangers.
ANSWER: **Houston** Astros [or Houston **Astros**]

BONUS: What DNA base forms namesake dimers when exposed to UV light and is replaced by uracil in RNA?
ANSWER: **thymine** [or **T**; or **thymidine**]

6. **This quantity can be calculated as the square root of the ratio of the permittivity to the permittivity of free space. A material that is birefringent (BYE-ruh-FRIN-jent) has multiple values for this quantity. Snell's law gives the ratio of the angles of (*)** incidence as a ratio of this quantity for two mediums. It is equal to the ratio of the speed of light in a vacuum to that in a particular medium. For 10 points, identify this quantity that is important to a phenomenon that makes straws appear bent in water.
ANSWER: **index of refraction** [or **refractive index**]

BONUS: What dictator of Cambodia and leader of the Khmer Rouge created the "killing fields?"
ANSWER: **Pol Pot** [or **Saloth Sar**]

7. **This goddess pulled a handful of hair out of the chest of Brontes after he placed her on his knee. This goddess killed the giants Otus and Ephialtes by tricking them into throwing a spear at each other. This goddess sent a boar to rampage through Calydon. (*)** Actaeon was transformed into a stag after he witnessed her bathing in a stream, and Leto gave birth to this goddess on Delos with her brother. For 10 points, name this Greco-Roman goddess of the moon and the twin sister of Apollo.
ANSWER: **Artemis** [or **Diana**]

BONUS: What name is given to the moment of greatest intensity in a narrative, conventionally thought of as being followed by the "falling action"?
ANSWER: **climax**

8. **In *Kafka on the Shore,* Johnnie Walker kidnaps one of these animals named Goma. Bengalsky is decapitated by one of these animals named Behemoth in *The Master and Margarita.* Thomas Gray composed an ode on the death of a favorite one of these animals. T. S. Eliot included (*)** "Bustopher Jones" and "Macavity" in "Old Possum's Book of Practical" ones. For 10 points, name this animal that, in a Tennessee Williams play, is "on a hot tin roof."
ANSWER: **cat**s [or obvious equivalents]

BONUS: What English actor voiced both Smaug and the Necromancer in *The Hobbit?*
ANSWER: Benedict **Cumberbatch**

SET A:

1. BONUS: What Austrian composer developed the twelve-tone technique and composed the string sextet *Transfigured Night*?
ANSWER: Arnold **Schoenberg**

014-14-102-1310-12

2. BONUS: What letter denotes the speed of light in physics and is given to a vitamin also known as ascorbic acid?
ANSWER: **c**

014-14-102-1310-12

3. BONUS: What Scottish mathematician developed logarithms and produced a number of tables with their values?
ANSWER: John **Napier**

014-14-102-1310-12

4. BONUS: This is a 20-second calculation question. A school brings six players to a quizbowl tournament. How many different ways are there to pick four players to play in a given round?
ANSWER: **15**

190-14-102-1310-12

SET B:

1. BONUS: What Giuseppe Verdi opera is about an Ethiopian princess?
ANSWER: *Aida*

014-14-102-1310-12

2. BONUS: What politician forced Treaty of Velasco by defeating Santa Anna at San Jacinto (ha-SEEN-toe) to become the first president of the Republic of Texas?
ANSWER: Sam **Houston**

015-14-102-1310-12

3. BONUS: What Byzantine emperor was challenged by the Nika riots?
ANSWER: **Justinian** I [or **Justinian** the Great]

014-14-102-1310-12

4. BONUS: This is a 20-second calculation question. What is the period of the sinusoid "y = 3 sine x"?
ANSWER: **2 pi** radians [or **360** degrees]

190-14-102-1310-12

9. **In a 2000 Supreme Court case, this organization was allowed to expel New Jersey leader James Dale. This organization, one of the few Congressionally chartered groups in America, expanded during the conservationist era under the leadership of Daniel Carter Beard and Ernest Thompson. As of 2014, it has retreated from a policy prohibiting (*)** gay members, but has not changed its stance on leaders. For 10 points, name this organization which teaches outdoor skills and patriotism.
ANSWER: **Boy Scouts** of America

019-14-102-13109

BONUS: What poem's first section, "The Burial of the Dead," begins with the line, "April is the cruelest month?"
ANSWER: *The **Waste Land***

014-14-102-1310-11

10. **One of this author's characters is mentored by a church organist named Pistorius and frequently obsesses about his friend's mother, Frau Eva. In another of this author's novels, the protagonist spends his days listening to a river, eventually becoming a (*)** ferryman, after his lover Kamala dies from a snakebite. This author wrote a novel set in Castalia about Joseph Knecht, who strives to become a Magister Ludi, or master of *The Glass Bead Game.* For 10 points, name this German author of *Demian* and *Siddhartha.*
ANSWER: Hermann **Hesse**

190-14-102-13110

BONUS: What beautiful youth spurned Echo and died after falling in love with his own reflection?
ANSWER: **Narcissus**

014-14-102-1310-11

11. **The scientific name of an animal named for this color is *Balaenoptera musculus.* This color is produced by radiation from particles modeled by the Frank-Tamm formula. Ferrocyanide salts can be found in a pigment of this color named for Prussia. Stars of this color inhabit the left part of the Hertzsprung-Russell diagram, which includes the star (*)** Rigel (RYE-jul). A solvated electron forms when alkali metals are dissolved in ammonia, displaying this color. It is not green, but solutions of copper ions are this color. For 10 points, what color does Rayleigh scattering impart to the sky?
ANSWER: **blue**

239-14-102-13111

BONUS: This is a 30-second calculation question. If f(x) ["f of x"] equals 4x+3 and g(x) equals $2x^2 - 5$, find f composed with g; that is, find f of g of x.
ANSWER: $8x^2 - 17$

037-14-102-1310-11

12. **The Euler-Mascheroni (OY-lur mash-uh-ROH-nee) constant is the limit of the difference between this function and the harmonic series. The coefficients of its Taylor series centered at one are the terms of the alternating harmonic sequence. Its derivative is (*)** "one over x". The value of this function applied to a product of numbers equals the sum of this function applied to each number separately. Its base is approximately 2.718. For 10 points, name this function inverse to the exponential function.
ANSWER: **natural log**arithm [or **base-e log**arithm]

121-14-102-13112

BONUS: What protein, encoded by HIV, allows the synthesis of DNA from RNA?
ANSWER: **reverse transcriptase** [or **RT**]

13. **Eight men died trying to end this event in Operation Eagle Claw. Frank Reynolds was the original host of a show started during this event; that show, later hosted by Ted Koppel, was ABC's** *Nightline.* **Six people escaped this event thanks to the** (*) Canadian Caper. This event was ended minutes after the inauguration of Ronald Reagan. For 10 points, name this event during the Carter administration that lasted for 444 days and included fifty-two Americans being held against their will in Tehran.
ANSWER: **Iran hostage** crisis

BONUS: What Middle Eastern country is the headquarters of Al-Jazeera and will host the 2022 FIFA World Cup?
ANSWER: **Qatar**

14. **Escaped slaves living in this area inspired Harriet Beecher Stowe's novel** *Dred.* **This area contains the larger of only two natural lakes in its state, Lake Drummond. George Washington surveyed it and suggested building a canal connecting the Albemarle Sound with the** (*) Chesapeake Bay. This marsh's current borders touch Camden County in the south and the cities of Chesapeake and Suffolk in the north. For 10 points, name this swamp in southeast Virginia and northeast North Carolina.
ANSWER: **Great Dismal** Swamp

BONUS: What Greek historian recorded the funeral oration of Pericles in his *History of the Peloponnesian War?*
ANSWER: **Thucydides**

15. **The protagonist of a novel by this author convinces Captain Anderson to allow James Colley to perform a religious service on Anderson's ship. In another of his novels, Christopher Martin recounts his life as he dies in the North Atlantic. This author of** *Rites of Passage* **and** *Pincher Martin* **described how a dead** (*) parachutist frightens a group of boys, who mistake the body for "the Beast" that haunts the island on which they have been stranded. For 10 points, name this British novelist of *Lord of the Flies.*
ANSWER: William **Golding**

BONUS: What Greek term denotes the use of excessive exaggeration as a figure of speech?
ANSWER: **hyperbole**

16. **This man was taught music by the German Julius Weiss. He may have named one of his pieces after a club in Sedalia, Missouri. The title character is saved from being thrown into a wasps' nest in this composer's opera** (*) *Treemonisha*. In the 1970s, one of his pieces became the theme song for the movie *The Sting*. This man wrote the compositions "The Entertainer" and "Maple Leaf Rag." For 10 points, name this African-American composer known as the "King of Ragtime."
ANSWER: Scott **Joplin**

BONUS: The protagonist of what novel dreams of lions on a beach in Africa, and continuously mentions the baseball player Joe DiMaggio as his idol?

ANSWER: *The **Old Man and the Sea***

17. **In this country, workers building the Stalinallee Boulevard rioted against the government in 1953. This country attempted to create a more efficient economy through Wolfgang Berger's New Economic System. Kurt Wismach shouted for free elections to be held in this country while Walter (*)** Ulbricht gave a speech. This country enacted a plan of "consumer socialism" while led by Erich Honecker. This country employed the Stasi police force and was where the Berlin Wall was built. For 10 points, name this former country that was reunited with its western counterpart in 1990.
ANSWER: **East Germany** [or **GDR**; or **German Democratic Republic**; or **Deutsche Demokratische Republik**; do not accept or prompt on "Germany"]

186-14-102-13117

BONUS: What band's 1991 album *Nevermind* featured the hit "Smells Like Teen Spirit?"
ANSWER: **Nirvana**

225-14-102-1310-11