

## Round 7

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### Tossups

(1) **A degenerate conic section may be represented with two of these objects intersecting. In three-dimensional space, these objects are described as (\*) “skew” if they lie in different planes and do not intersect. These objects can be drawn as a pair of opposite rays, and they contain an infinite number of points. For ten points, name these one-dimensional geometric objects that extend infinitely far in both directions.**

ANSWER: lines (accept line segments until “rays” is read; accept rays until “rays” is read)

(2) **In a novel set in this country, Bamford’s wife, Maureen Smales, runs toward a mysterious helicopter after struggling to live in her former servant’s village. This country is home to the authors of (\*) *Master Harold...and the Boys* and *July’s People*, Athol Fugard and Nadine Gordimer, and is the setting of a novel about Stephen Kumalo. For ten points, name this country, the setting of Alan Paton’s novel *Cry, the Beloved Country*, which is partially set in Apartheid-era Johannesburg.**

ANSWER: South Africa (accept Republic of South Africa or RSA)

(3) **With Hilbert, this scientist names an “action” that figures into a tensor-notated set of equations named for this man. In his *annus mirabilis*, he explained the (\*) photoelectric effect, which won this man the 1921 Nobel Prize in Physics. This man wrote ten field equations to describe one of his theories, and wrote a formula for mass-energy equivalence, “E equals M C squared.” For ten points, name this German physicist who formulated the “special” and “general” forms of a theory of relativity.**

ANSWER: Albert Einstein

(4) **This team’s Damien Williams opted out of their current season due to COVID-19 after this team drafted his apparent replacement, Clyde Edwards-Helaire [Clyde Edwards ell-AYR]. This team’s head coach, Andy Reid, claimed not to have heard their fans booing a moment of silence at the 2020 season opener. A (\*) five-hundred-three-million-dollar contract was signed by this team’s starting quarterback, Patrick Mahomes, who led this team to a victory over the Forty-Niners to win the 2020 Super Bowl. For ten points, name this NFL team that plays in Kansas City.**

ANSWER: Kansas City Chiefs (accept Kansas City before it is read)

(5) **A memorial on this city’s Liberty Street incorporates part of a destroyed memorial commemorating a 1993 car-bombing in this city. A photo taken in this city shows Marcy Borders covered in a thick yellow dust after (\*) United Flight 175 and American Airlines Flight 11 crashed into this city’s Twin Towers. The World Trade Center was targeted during a terrorist action in, for ten points, what largest American city, which was attacked on September 11th, 2001?**

ANSWER: New York City (accept NYC)

(6) In this poem, a “frozen-ground-swell” inspires two workers to create the “spell” that says, “Stay where you are until our backs are turned!” This poem’s speaker mentally objects that “there are no cows” in fields full of pine and apple trees when his friend claims that (\*) “good fences make good neighbors,” and reflects that “something there is that doesn’t love” the title structure. For ten points, name this poem by Robert Frost in which a pair of neighbors rebuild a barrier together.

ANSWER: Mending Wall

(7) This mythical creature was returned to its home by a hero who rescued Theseus from a “Chair of Forgetfulness.” While traveling with Aeneas, the Cumaean Sibyl used a drugged honey cake to subdue this animal. This child of (\*) Typhon and Echidna was often depicted with snakes for a tail. During one of his last labors, Heracles either captured this animal or was given it by Persephone. For ten points, name this three-headed dog that guarded the underworld in Greek myth.

ANSWER: Cerberus (accept Kerberos)

(8) These structures can cause the formation of maars and fissures called diatremes. Tuff is consolidated after emerging from these structures, which can form calderas near their vents. These structures produce pahoehoe [pah-hoh-ay-hoh-ay] and a’ā [ah-ah], which can form (\*) obsidian, pumice, and other igneous rocks after cooling, and they expel lapilli and other forms of tephra as part of their pyroclastic flow. Shield and cinder-cone are two types of, for ten points, what geologic structures whose eruptions often produce lava?

ANSWER: volcanoes (accept shield volcanoes; accept cinder-cone volcanoes)

(9) This movement’s “three grand dames” included the creator of *The Cradle* and *Woman and Child on a Balcony*, Berthe Morisot [bayr-tah moh-ree-SOH]. As part of this movement, Mary Cassatt painted *The Boating Party*, in which large brushstrokes capture the movement of light on water. (\*) “Plein air” paintings of *Rouen Cathedral* and *Waterlilies* characterize this movement. For ten points, name this mostly-French art movement that emphasizes “sketch-like” lines and strokes, and that was named for a Claude Monet painting of a *Sunrise*.

ANSWER: Impressionism (accept word forms like Impressionist movement)

(10) In 1975, this country’s Prime Minister convinced Fakhruddin Ali Ahmed to declare martial law, beginning this country’s two-year-long “Emergency.” An activist in this country was killed by Nathuram Godse, and was a friend of its first prime minister, (\*) Jawaharlal Nehru. In 1947, this country gained its independence from the United Kingdom in a process that also resulted in the creation of Pakistan. Indira and Mahatma Gandhi were from, for ten points, what country with capital at Delhi?

ANSWER: India (accept Republic of India; accept Bharat Ganarajya)

(11) A poet with this surname described a “wrinkled lip” and “sneer of cold command” on the face of a statue, and asked “if Winter comes, can Spring be far behind?” in another poem. An author with this last name wrote about Henry (\*) Clerval’s friend, who mourns the death of Elizabeth Lavenza after she is killed by his creation. “Ode to the West Wind” and “Ozymandias” are by a Romantic poet with this surname. For ten points, give this surname shared by poet Percy and his wife Mary, the author of *Frankenstein*.

ANSWER: Shelley (accept Percy Bysshe Shelley or Mary Wollstonecraft Shelley)

(12) **This river's Grand Inga Dam is downstream from where it is fed by the Kwilu and Inkisi Rivers. This river is crossed by the Matadi Bridge between a national capital and Banana, a city on the Atlantic Ocean.** Lake (\*) Tanganyika drains into this river, which was once known as the Zaire. For ten points, name this second-longest river in Africa, which separates Kinshasa and Brazzaville, the capital cities of two countries named for this river.

ANSWER: Congo River (accept Nzâdi Kôngo; accept Lower Congo River; accept Zaire River before it is read)

(13) **This author of the letter "To the Inhabitants of America" suffered a gruesome leg injury in an attack on Quebec City that killed Richard Montgomery. This man's wife, Peggy Shippen, connected him with John** (\*) André, who was hanged in October 1780 after being caught with papers written by this man. For ten points, name this officer in the American Revolution who became infamous for his failed attempt to betray West Point to the British.

ANSWER: Benedict Arnold

(14) **In a hadith about this man, he learned that Khidr knew more about the ways of God than he did. God planned to kill this man until his wife, Zipporah, cut off his son's foreskin. This man's sister, the prophet** (\*) Miriam, led celebratory singing after this man parted the Red Sea, and his brother, Aaron, made a golden calf idol while this man spoke with God on Mount Sinai. For ten points, name this religious figure who led the Israelites' exodus out of Egypt and received the ten commandments.

ANSWER: Moses (accept Moshe; accept Musa)

(15) **A type of this interaction occurs three times between guanine and cytosine, is responsible for the high specific heat of water, and is named for hydrogen. Alkenes and alkynes are hydrocarbons that have** (\*) "double" and "triple" ones of these interactions between carbon atoms. When pairs of atoms have different charges or share electrons, these structures between them are called ionic or covalent. For ten points, name these structures that hold atoms or molecules together.

ANSWER: chemical bonds (accept word forms like bonding; accept hydrogen bonds; accept double bonds; accept triple bonds; accept ionic bonds; accept covalent bonds)

(16) **This man discussed the development of religion in *The Future of an Illusion* and discussed the pressure of societal expectations in *Civilization and its Discontents*. This man described the conflict between Thanatos and Eros in** (\*) *Beyond the Pleasure Principle*. This psychologist wrote about "Irma's Injection" in *The Interpretation of Dreams*, and in another work, he described *The Ego and the Id*. For ten points, name this psycho-analyst who proposed that an urge to destroy one's father was part of an "Oedipus complex."

ANSWER: Sigmund Freud (accept Sigismund Schlomo Freud)

(17) **In an opera by this composer, the "Letter Aria" is sung by Tatyana. In a ballet by this composer, the sorcerer von Rothbarth tries to separate Prince Siegfried from Odette. In another work by this composer,** (\*) "God Save the Tsar" drowns out "La Marseillaise" [lah mar-sah-yez] in a representation of Napoleon's failed invasion of Russia. For ten points, name this Russian composer of the opera *Eugene Onegin*, the ballet *Swan Lake*, and the *1812 Overture*.

ANSWER: Pyotr Ilyich Tchaikovsky

(18) **This novel’s protagonist gets into a fight over Jane Gallagher with his roommate, Stradlater, who doesn’t appreciate an essay about the poetry on Allie’s baseball glove. This novel’s protagonist wonders about the ducks in (\*) Central Park, and plans to run away with his sister, Phoebe, while dealing with his expulsion from Pencey Prep. For ten points, name this novel in which Holden Caulfield wanders aimlessly through New York City, written by J.D. Salinger.**

ANSWER: The Catcher in the Rye

(19) **In this country, the Alhambra Decree expelled Jews who refused to convert to Christianity. This country’s “Catholic monarchs” conquered the Nasrid kingdom of Granada in 1492 to end the lengthy (\*) Reconquista. This country was formed by the union of Castille and Aragon, which resulted from the marriage of Ferdinand and Isabella. Toledo was the former capital of, for ten points, what country that shares the Iberian Peninsula with Portugal and is now led from Madrid?**

ANSWER: Spain (accept Kingdom of Spain; accept Reino de España)

(20) **Among the largest of these organisms is Utah’s clonal colony called “Pando.” The podocarp family of these organisms is common in the Southern Hemisphere. By definition, these organisms must have a (\*) lignin-reinforced secondary xylem [ZY-lehm], whose annual growth is the basis for dendro-chronology. These plants can be broadly classified as deciduous or evergreen, and they possess an outer layer of bark. For ten points, name these woody plants such as the pine and oak.**

ANSWER: trees (accept quaking aspen before “podocarp” is read; prompt on “plant” before it is read)