



Tossup 1: Math — Calculus

<p>Computers use it to do division, and it can be used to quickly find square roots. Its namesake discoverer only used it for polynomials, but it can be used on almost any function that has a zero. However, certain initial values will cause this technique to diverge. The next approximation can be calculated by taking the current guess and subtracting the value of the function over its derivative. Name this method that is used to find the zeros of an equation.</p>	<p><u>Newton's Method</u> (<i>accept <u>Newton-Raphson Method</u> or <u>Newton-Fourier Method</u>, prompt on <u>Newton's Iteration</u></i>)</p>
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Bonus 1: Miscellaneous — Entertainment

<p>Give the titles of the following Mockumentaries.</p>		
<p>A</p>	<p>The defending holder of the title title, Rhapsody in White, is upset by a terrier named Tinky.</p>	<p><u>Best in Show</u></p>
<p>B</p>	<p>A pre- "Spiderman" Kirsten Dunst and a pre-Charlie Sheen Denise Richards face off in the Sarah Rose Cosmetics Mount Rose American Teen Princess Pageant.</p>	<p><u>Drop Dead Gorgeous</u></p>
<p>C</p>	<p>Loosely drawn from a Samuel Beckett work, the title refers to a Broadway Theater critic set to arrive in Blaine, Missouri.</p>	<p><u>Waiting for Guffman</u></p>
<p>D</p>	<p>This Toronto Film Festival winner is set in a fictional future where the country has been changed by the 2007 assassination of President Bush.</p>	<p><u>Death of a President</u></p>



Tossup 2: Literature — Literature

<p>What is widely considered his finest play was actually not supposed to be made public until twenty-five years after his death, due to its autobiographical nature. Despite this it was released three years after the death of this author, winning the 1957 Pulitzer Prize for Drama. Also winning the Nobel Prize for Literature in 1936, identify this playwright, famous for plays such as The Emperor Jones, The Iceman Cometh and Long Day's Journey into Night.</p>	<p>Eugene Gladstone <u>O'Neill</u></p>
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Bonus 2: Social Studies — Other

<p>Crikey! Answer the following about government Down Under.</p>	
A	<p>Australian parliament currently meets in this city, chosen as the capital city in 1908.</p> <p><u>Canberra</u></p>
B	<p>Parliament originally met in this city, the capital of the state of Victoria.</p> <p><u>Melbourne</u></p>
C	<p>The official head of the Australian Executive Branch lives in this building, not located in the country.</p> <p><u>Buckingham Palace</u></p>
D	<p>This is the most populous state in Australia and contains the town of Sydney.</p> <p><u>New South Wales</u></p>



Tossup 3: Science — Biology

Though apparently contradicting the central dogma of molecular biology, these integrate themselves into their hosts' genomes as a DNA provirus. Because they do not have sophisticated error-checking mechanisms when copying their genetic material, they are susceptible to rapid mutation, which is one reason HIV is difficult to treat. Name this group of viruses that uses reverse transcriptase to convert RNA into DNA.	<u>Retrovirus</u>
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Bonus 3: Literature — Mythology

Answer the following about the Norse version of the Apocalypse, Ragnarok.		
A	Ragnarok itself will be preceded by Fimbulwinter, which is a span of this many consecutive winters.	<u>3</u>
B	This god will slay Jormungand (<i>YOUR-moon-gand</i>), the Midgard Serpent, but will die from the poison that the serpent spews out.	<u>Thor</u>
C	After all bonds have been broken, this trickster god will escape and join the side of the giants.	<u>Loki</u>
D	This guard of the Bifrost bridge will fight the god in part C, and neither will survive the evenly matched encounter.	<u>Heimdall</u>



Tossup 4: Fine Arts — Music

<p>It takes place in imperial China, where anyone who wishes to wed the titular princess must first answer her three riddles. It opens with a Persian prince being beheaded after failing the riddle. Franco Alfano was selected against the composer's wishes to finish this opera, but his original edits were criticized by conductor Arturo Toscanini, who would direct its premiere in 1926. Identify this opera, left unfinished at the death of composer Giacomo Puccini.</p>	<p><u>Turandot</u></p>
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Bonus 4: Science — Physics

Name these concepts related to fluids.		
A	This principle states that the buoyant force on an object in a fluid is equal to the weight of fluid that it displaces.	<u>Archimedes'</u> principle
B	This principle roughly states that faster-moving fluids have lower pressure than slower-moving fluids.	<u>Bernoulli('s)</u> principle
C	This type of chaotic flow in fluids is the opposite of laminar flow, in which fluid flows in parallel layers.	<u>Turbulent flow</u> (<i>accept turbulence</i>)
D	This flow occurs when the flow velocity of a fluid is faster than the velocity of a wave within it.	<u>Supercritical flow</u>



Tossup 5: Social Studies — U.S. History

This “dirty” technique was first widely used in the election of 1824, when a candidate was accused of being a drunkard. One of the most famous examples of this is Lyndon Johnson’s “Daisy” commercial from the 1964 Presidential election. Identify this 11-letter term for emphasizing an opponent’s weaknesses in a campaign rather than one’s strengths, a form of negative campaigning.

Mudslinging

Bonus 5: Math — Geometry

Answer the following about a sphere with radius 3.

A	Give the circumference of the sphere's great circle.	<u>6 pi</u>
B	Give the surface area of the sphere.	<u>36 pi</u>
C	Give the volume of a cube circumscribed about the sphere.	<u>216</u>
D	Give the volume of a cube inscribed in the sphere.	<u>54 root 2</u>



Tossup 6: Miscellaneous — Entertainment

<p>Storylines of this show's second season include a New Orleans native trying to support her family and a pair of siblings trying to cross into America. Early in that season, George Takei's character was killed when he was thrown from a building, while his son was trapped in 17th century Japan. A new character was introduced who can fly, and he began dating former cheerleader Claire, played by Hayden Panettiere (<i>pan-et-ee-AY</i>). Name this NBC show about a group of people with special powers.</p>	<p><u>Heroes</u></p>
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Bonus 6: Social Studies — Geography

<p>Identify these countries that have multiple important administrative cities.</p>		
<p>A</p>	<p>This nation's president resides in Pretoria while the National Parliament is in Cape Town and the Supreme Court sits in Bloemfontein.</p>	<p><u>South Africa</u></p>
<p>B</p>	<p>Although the National Congress of this South American country meets in Valparaiso, the internationally recognized capital is Santiago.</p>	<p><u>Chile</u></p>
<p>C</p>	<p>Bern is the designated Federal City of this country, but the Supreme Court is located in Lausanne.</p>	<p><u>Switzerland</u> (<i>accept <u>Swiss Confederation</u></i>)</p>
<p>D</p>	<p>An independent state since 2006, this Balkan country has its de facto capital at Podgorica even though the constitution puts the capital at Cetinje (<i>set-TEEN-yeah</i>).</p>	<p><u>Montenegro</u></p>



Tossup 7: Literature — Literature

In 1913, he pruned his "In a Station at the Metro" from 30 lines down to 14 words. This poem is a paragon of the Imagist movement, of which, this poet was a leading figure. His involvement with Imagism as well as his decree of "Make it new!" inspired the Modernist movement. Outside of the literary sphere, this man faced charges of treason for his involvement with Italian propaganda. Identify this American expatriate poet of The Cantos.	Ezra Weston Loomis <u>Pound</u>
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Bonus 7: Science — Chemistry

Identify these terms related to electrochemistry.	
A	This unit is equal to a mole of electrons. <u>Faraday</u>
B	Standard reduction potentials are measured by defining a half-cell of this gas as zero volts. <u>Hydrogen</u>
C	The combination of two half-cells can be called a Galvanic cell, or equivalently, this name, in honor of the Italian creator of the first modern battery. <u>Voltaic cell</u>
D	Spontaneous cells yield electric current. Running current backwards through a cell causes this chemical process to occur, which can separate ionic compounds. <u>Electrolysis</u>



Tossup 8: Math — Calculus (Computational: 30 Seconds)

Solve the differential equation dy over dx equals three x squared times y , where the solution goes through the point $(0,1)$.

$y = e$ to the x cubed power

Bonus 8: Fine Arts — Visual Art

Identify the creators of the following modern works of sculpture.

A	Bronco Buster	Frederic <u>Remington</u>
B	Bird in Space	Constantin <u>Brâncuși</u>
C	Fountain	Marcel <u>Duchamp</u>
D	Lobster Tail and Fish Trap	Alexander <u>Calder</u>



Tossup 9: Social Studies — World History

<p>His second trip to the Americas was far less fruitful than his first, when he discovered Cape North and Cape Ray. However, he did not think he had discovered a continent, but rather a new route to Asia. Name this Italian who, in the late 15th century, was one of the first Europeans to explore North America, when he did so for Britain.</p>	<p>John Cabot (accept Giovanni Caboto)</p>
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Bonus 9: Literature — Literature

<p>Answer the following about mothers in literature:</p>		
<p>A</p>	<p>This woman has an illegitimate daughter with Count Vronsky, and the resultant strain on her social life and relationships causes her to commit suicide.</p>	<p>Anna Karenina (accept either)</p>
<p>B</p>	<p>Faulkner's novel As I Lay Dying is about a family's journey to bury this family matriarch in Jefferson, Mississippi.</p>	<p>Addie Bundren (prompt on Bundren)</p>
<p>C</p>	<p>This mythical woman became the mother of a god and a goddess after Zeus came to her in the form of a swan.</p>	<p>Leto</p>
<p>D</p>	<p>In the book Wuthering Heights, she dies shortly after giving birth to the daughter who shares her name. That daughter goes on to marry her cousins Linton and Hareton in quick succession.</p>	<p>Catherine (accept Linton, Earnshaw, or Heathcliff as last names)</p>



Tossup 10: Science — Astronomy

These objects were originally called the Medician (*med-EE-chee-un*) Stars by their current namesake. First observed in 1610, their discovery was outlined in "Sidereus Nuncius," a paper which also noted that the surface of the moon was not smooth, both observations made possible by the development of the telescope. Now named after four lovers of Zeus, give this collective term for the four largest moons of Jupiter.

Galilean moons (*accept Galilean satellites*)

Bonus 10: Math — Other

Given a fair two-sided coin, what is the probability that the following events will occur?

A	You flip three heads in a row.	<u>1/8</u>
B	You flip the coin five times, and at least one is heads.	<u>31/32</u>
C	You flip the coin four times, and all the flips are the same.	<u>1/8</u>
D	You flip the coin six times, and at most two are tails.	<u>11/32</u>

END OF FIRST HALF – 2 minute timeout



Tossup 11: Social Studies — Geography

Named after the commissioner of water reclamation serving over the course of its creation, it is located near Lake Mohave. This body of water that stretches across parts of both Arizona and Nevada is on the Colorado River, and has been around for little more than 70 years. Name this largest man-made lake in the United States, which was created by the Hoover Dam.

Lake Mead

Bonus 11: Science — Chemistry

Give the empirical formula for each of the following molecules. For example, the empirical formula of ethane, C₂H₆, would be C₁H₃.

A	Benzene	<u>CH</u> (accept C ₁ H ₁)
B	Ethene	<u>CH₂</u> (accept C ₁ H ₂)
C	Cyclohexane	<u>CH₂</u> (accept C ₁ H ₂)
D	Formaldehyde	<u>CH₂O</u> (accept C ₁ H ₂ O ₁)



Tossup 12: Science — Physics

<p>This phenomenon arises from shear and extensional stress between layers of fluid, which for Newtonian fluids, is proportional to the perpendicular velocity of the fluid layers. Ideal fluids have none due to shear stress, but at low temperatures, helium liquid has none at all, making it a superfluid. Measured in Pascal-seconds, name this physical quantity observed as the thickness of a fluid.</p>	<p><u>Viscosity</u></p>
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Bonus 12: Miscellaneous — Sports

<p>Identify these winners of baseball's Rookie of the Year award.</p>		
<p>A</p>	<p>This 1997 winner for the NL spent many years with the Phillies before being traded to the St. Louis Cardinals in 2002.</p>	<p>Scott Bruce <u>Rolen</u></p>
<p>B</p>	<p>This Kansas City Royals shortstop, who won in 2003, now plays mostly in the minor leagues.</p>	<p>Angel <u>Berroa</u></p>
<p>C</p>	<p>This 2005 winner in the NL hit 22 homeruns in barely half a season during his rookie year.</p>	<p>Ryan James <u>Howard</u></p>
<p>D</p>	<p>This Oakland A's reliever won the award in 2005 after posting a 1.72 ERA.</p>	<p>Huston Lowell <u>Street</u></p>



Tossup 13: Literature — Language Arts

<p>The original example of this particular word comprised Sir Thomas Clifford, Lord Arlington, the Duke of Buckingham, Lord Ashley, and Lord Lauderdale, ministers of Charles II of England. Referring to a group of people united in secret alliance in order to promote their own interests, identify this word, a rare example of an acronym used as a word on its own, comprising the first letters of the last names of the aforementioned ministers.</p>	<p><u>Cabal</u></p>
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Bonus 13: Social Studies — U.S. History

Identify these facts related to the history of Texas.		
A	This man was the first president non-interim of the Republic of Texas.	Samuel <u>Houston</u>
B	In 1845, this president approved the admission of Texas to the union.	John <u>Tyler</u> Jr.
C	This man, for whom the capital city is named, moved 300 families to what is now Texas in the 1820s.	Stephen Fuller <u>Austin</u>
D	This man was the commander of the force at the Alamo.	William Barret <u>Travis</u>



Tossup 14: Miscellaneous — Interdisciplinary

In 1988's "The Naked Gun", Detective Drebbin comically destroys this painting while trying to save it from a fire. It is defaced by spray paint at the base of the stairs in Gotham City's Flugelheim Museum in 1989's "Batman". James Bond slashed it with a sword while fighting Gustav Graves in "Die Another Day". The real one hangs safely at the Huntington Library in California. Identify this 1770 portrait of Jonathan Buttall, the young son of a friend of the artist, Thomas Gainsborough.

Blue Boy (*prompt on Portrait of Jonathan Buttall before mentioned*)

Bonus 14: Math — General

Given the beginning of a mathematical sequence or series of numbers, identify it by its common name.

A	1, 1, 2, 3, 5, 8, 13, 21...	<u>Fibonacci</u> numbers
B	$1 + 1/2 + 1/3 + 1/4 + 1/5...$	<u>Harmonic</u> series
C	2, 1, 3, 4, 7, 11, 18, 29...	<u>Lucas</u> numbers
D	6, 28, 496, 8128...	<u>Perfect</u> numbers



Tossup 15: Math — Geometry (Computational: 30 Seconds)

Find the area of a triangle with sides of length 5, 4, and 7.	<u>4 root 6</u>
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Bonus 15: Literature — Literature

Identify the following about animals in Literature.	
A	A bird is the title character of this creepy Edgar Allen Poe poem, in which the narrator may have killed Lenore. <u>The Raven</u>
B	This work features the characters of Lennie and George, two migrant workers in the Salinas Valley. <u>Of Mice and Men</u>
C	This Ken Kesey work is about an Oregon Mental Asylum and is based on the author's own experience as an orderly. <u>One Flew Over the Cuckoo's Nest</u>
D	This Keats poem sees the author imagining himself as a "sod" over which the titular bird sings. <u>Ode to a Nightingale</u>



Tossup 16: Social Studies — Current Events

<p>His April 2006 attempt to allow women to attend sporting events was blocked by the Supreme Leader of his country, the first such intervention since this man's inauguration in August 2005. He caught flak in 2006 for supporting a Holocaust denial convention and was criticized by, among others, Lee Bollinger, president of Columbia University, when he was invited to speak in September 2007. Name this man, the sixth President of Iran.</p>	<p>Mahmoud <u>Ahmadinejad</u> (<i>ah-mah-DIN-eh-zhad</i>)</p>
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Bonus 16: Science — Biology

Identify these things related to breakthroughs in preventing disease.		
A	This British doctor is usually credited with performing the first vaccination, injecting cowpox to protect people from smallpox.	Edward <u>Jenner</u>
B	This American doctor developed the first polio vaccine in the early 1950s.	Jonas <u>Salk</u>
C	Sailors often didn't get enough vitamin C in their diet, leading to this deficiency disease that was not linked to vitamin C until 1932.	<u>Scurvy</u>
D	In the early twentieth century, it was established that the disease pellagra was linked to a deficiency in this vitamin.	Vitamin <u>B3</u> (<i>accept <u>niacin</u></i>)



Tossup 17: Literature — Mythology

At the request of Venus, he appeared in the guise of Ascanius beside Aeneas when he met Dido. Some record him as the son of Nyx and Erebus, making him out to be a riotous debaucher, while others record that he was the son of Jupiter and Venus, portraying him as a lover of pranks and spreading love. Famous for his abduction and subsequent relationship with Psyche, identify this god, most commonly represented holding a bow and arrow.

Cupid (*accept Amor, do not accept Eros*)

Bonus 17: Social Studies — World History

Given a country or empire and the years in which they ruled, name the famous dictator, emperor, or monarch.

A	Ethiopia, 1930-1974	Haile Selassie
B	Cuba, 1938-1959	Fulgencio Batista
C	Holy Roman Empire, 1790-1792	Leopold II (<i>prompt on Leopold; accept Peter Leopold Joseph</i>)
D	Russia, 1696-1725	Peter the Great (<i>prompt on Peter; accept Peter I</i>)



Tossup 18: Math — Algebra (Computational: 30 Seconds)

A particular country has license plates that begin with two non-identical letters, and then have three digits, all of which are different. How many different license plates can that country issue?	<u>468,000</u>
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Bonus 18: Literature — Literature

You probably know that an important document was printed in 1776. Now name some of these other major works from that year.	
A	This Thomas Paine pamphlet lays out several arguments in favor of America's independence from Britain. <u>Common Sense</u>
B	This work describes an "invisible hand," which guides a free economy in which people pursue their own interests. <u>An Inquiry into the Nature and Causes of the Wealth of Nations</u>
C	In this essay, John Adams describes politics as "the science of human happiness" and makes suggestions for a new constitution. <u>Thoughts on Government, Applicable to the Present State of the American Colonies</u>
D	Edward Gibbon blames the title event of this book on the loss of old values and the frequent barbarian invasions. <u>The History of the Decline and Fall of the Roman Empire</u>



Tossup 19: Fine Arts — Visual Art

<p>After killing Ranuccio Tomassoni, this artist was forced to flee Rome. While in Rome, he had painted Young Sick Bacchus and The Fortune Teller. Later, while in Naples, he painted The Seven Works of Mercy. To further escape his legal troubles, he went to Sicily, where he painted Burial of St. Lucy and The Raising of Lazarus. Name this oft-troubled Baroque artist who painted The Cardsharps.</p>	<p>Michelangelo Merisi da Caravaggio</p>
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Bonus 19: Math — Algebra

<p>Given the equation of the parabola $y = x^2 + 2x - 63$; answer the following questions:</p>		
A	What are the roots of y ?	x equals <u>7 and -9</u> (in either order)
B	What is the discriminant of y ?	<u>256</u>
C	What is the vertex of y ?	<u>(-1, -64)</u>
D	What is the focus of y ?	<u>(-1, -63.75)</u> (accept (-1, -255/4))



Tossup 20: Science — Chemistry

<p>The carbon in this functional group is electrophilic because its electron density is pulled toward the oxygen it is bonded to. Found in many organic compounds, esters contain this group next to an oxygen, ketones have it in the middle of a carbon chain, aldehydes have it at the end of a carbon chain, and carboxylic acids have it next to an OH. Also used to refer to carbon monoxide, name this functional group consisting of a carbon double-bonded to an oxygen.</p>	<p><u>Carbonyl</u> group</p>
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Bonus 20: Fine Arts — Music

<p>Identify the following Germanic composers.</p>		
<p>A</p>	<p>In his Heiligenstadt (<i>Hi-lig-in-shtat</i>) Testament, this composer laments the deafness that had developed since about 1801.</p>	<p>Ludwig van <u>Beethoven</u></p>
<p>B</p>	<p>This Austrian composer wrote several song cycles, including The Song of the Earth.</p>	<p>Gustav <u>Mahler</u></p>
<p>C</p>	<p>This composer is famous for operas such as Tristan und Isolde and Der Meistersinger von Nuremberg.</p>	<p>Richard <u>Wagner</u></p>
<p>D</p>	<p>This Austrian, known for long works that he consistently revised, is famous for his Te Deum and his Symphony No. 0, a Study Symphony and died in 1896.</p>	<p>Anton <u>Bruckner</u></p>

END OF MATCH



Tossup A: Literature — Mythology

It was he who said the famous line "Fear the Greeks, even bearing gifts", when he beheld the Trojan Horse. Athena or Poseidon, depending on the source, promptly sent two serpents to crush him and his sons, in order to keep the Greek's surprise attack a secret. Name this unfortunate Trojan priest, the subject of a famous ancient sculpture by Polydorus of Rhodes.

Laocoön (*la-AH-coo-on*)

Bonus A: Miscellaneous — Sports

Answer these questions related to this college football season's bowl games. (*Note: accept either school name or nickname or both.*)

A	This team almost upset Boston College in the Champs Sports Bowl, but turnover by quarterback Brian Hoyer cost them.	<u>Michigan State University Spartans</u>
B	Quarterback Curtis Painter threw for 546 yards in a win in the Motor City Bowl over this team.	<u>Central Michigan University Chippewas</u>
C	This team, whose coach died of complications from a tumor in June 2007, made a bowl for the first time in over a decade.	<u>Indiana University Hoosiers</u>
D	This Big Ten school played in its first Rose Bowl since 1984.	<u>University of Illinois Fighting Illini</u>



Tossup B: Social Studies — U.S. History

He was part of the American delegation at the Yalta Conference, where he was extremely critical of Soviet actions. In the early 1950s, he spent nearly four years in prison for perjury, after being accused of hiding secret government information inside a pumpkin for Soviet spies. Name this man, accused of espionage by Whittaker Chambers, but never convicted.

Alger Hiss

Bonus B: Math — Calculus

Evaluate the definite integrals of the following functions from 0 to 3.

A x to the fourth

243/5

B The natural log of x

3 ln 3 - 3

C Sine of the quantity π times x

2 over pi

D e to the quantity x over 3

3 e - 3



Tossup C: Science — Physics

Named after the assistant of Rutherford that invented it, this device was invented to replace manually counting the flashes of scintillation devices. Consisting of a high-voltage wire inside a gas tube, it can detect the presence of high-energy ionized particles by the current they induce in the gas when ionizing it. Name this device which clicks to indicate the presence of radiation.	<u>Geiger(-Müller) counter</u>
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Bonus C: Social Studies — Geography

Identify these Montana cities.		
A	This city is Montana's capital.	<u>Helena</u>
B	This western city is home to the flagship campus of the University of Montana system.	<u>Missoula</u>
C	This former boomtown known for its copper shares its name with a geologic feature similar to a plateau.	<u>Butte</u>
D	This Southwestern city is named after long trail used during the gold rush.	<u>Bozeman</u>



Tossup D: Math — Other (Computational: 30 Seconds)

You have six cans of soda, two of which have been thoroughly shaken up by your thoughtless friend. Assuming that the shaken cans will erupt soda when opened, what is the probability that you will open three cans of soda without getting soda all over you and your new tuxedo?	<u>1/5</u>
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Bonus D: Literature — Literature

Identify the following works of literature that all feature punctuation in the title.		
A	Featuring a comma, this Sherwood Anderson work is a collection of short stories focusing on George Willard.	<u>Winesburg, Ohio</u>
B	Sporting an apostrophe, this work of Ambrose Bierce is a collection of clever definitions.	The <u>Devil's Dictionary</u>
C	Also possessing an apostrophe, this penultimate novel of Hardy is subtitled "A Pure Woman Faithfully Presented."	<u>Tess of D'Urbervilles</u>
D	Bearing both an apostrophe and a question mark, this Albee play features the characters Martha, George, Nick, and Honey.	<u>Who's Afraid of Virginia Woolf?</u>



Tossup E: Fine Arts — Visual Art

<p>This picture is seen through an arch, one of a series of them that continues into the background. On either side, the statues of Apollo and Athena flank a set of marble steps. Diogenes is sitting on those steps, while, around him, Zoroaster and Ptolemy mingle. This painting of the greatest classical philosophers features Plato and Aristotle, and was created by Raphael.</p>	<p>The <u>School of Athens</u></p>
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Bonus E: Science — Biology

<p>Answer these questions about cellular respiration.</p>		
<p>A</p>	<p>Cellular respiration is also called this cycle, after either the biochemist who discovered it, or a compound in it.</p>	<p><u>Citric acid cycle</u> (accept <i>Krebs cycle</i>)</p>
<p>B</p>	<p>Cellular respiration uses pyruvic acid, which is formed through this energy-reaping process.</p>	<p><u>Glycolysis</u></p>
<p>C</p>	<p>Cellular respiration regenerates this so-called "energy currency" of the cell.</p>	<p><u>ATP</u></p>
<p>D</p>	<p>This chain of cellular complexes helps turn intermediate compounds into energy, by moving charge through a series of enzymes.</p>	<p><u>Electron transport chain</u></p>