Which fictional family has sons named Noah, Al, Winfield, and Tom and daughters named Ruthie and Rose of Sharon? They appeared in a 1939 novel which portrayed their move to California. Name this family from John Steinbeck's The Grapes of Wrath.

ANSWER: Joad(s)

## 2. Chemistry (10 Seconds)

An artificial isotope of which element with a mass number of sixty is often used to create gamma rays? Though it is gray, the element is used to make blue stained glass. Name this metal which is located between iron and nickel on a periodic table.

ANSWER: Cobalt

## 3. World History

The invaders lost this battle because they did not use distance weapons, they were afraid that their captured loot would be raided, and Abd er-Rahman died. The defenders kept their formation and were unified after Eudo swore loyalty to Charles Martel. Name this battle which took place in Western France in 732 AD.

ANSWER: (Battle of) Tours (or Poitiers)

## 4. Technology

Its primary customers are lawyers, though it is often used by journalists and academics as well. Because it charges a fee, it is not used often by high school students. Name this searchable archive that contains links to a large number of articles and cases dating back to 1986.

ANSWER: LexisNexis (prompt on half the answer)

## 5. Language Arts

Give your answer in English. Greek works of this type included obscenity and slang. Roman works presented a variety of social types. Since the Romans, this term has been connected with happy endings, and in the past few hundred years it has become connected with humor.

ANSWER: Comedy (or Comedies)
6. Algebra (30 Seconds)

Solve for x : The $\log$ base x of 7 equals one-third. $\left[\log _{\mathrm{x}} 7=1 / 3\right]$
ANSWER: 343

## 7. Astronomy/Earth Science/Geography

Which river, though it starts at an elevation of only 740 feet, travels for 2300 miles? Known in ancient times as Atil, it flows past Kazan and Samara before emptying into the Caspian Sea. It begins near Moscow and is the longest river in Europe.

ANSWER: Volga (River)
8. Music

Who is loved by the artist Cavaradossi and the police chief Scarpia? As in any good opera, all three of them
die. She is the title character in an opera whose action takes place in 1800 and which was originally performed in 1900. The opera was written by Puccini.

ANSWER: Tosca

## 9. Religion/Mythology

Which object is first mentioned in the Bible in the Book of Numbers Chapter Ten Verse Thirty-Three, which states that it searched out a resting place on a three-day journey? It is last mentioned in the Book of Hebrews Chapter Nine Verse Four, which states that it was overlaid with gold and had the pot of manna and Aaron's rod. Nobody knows where it is now, but there has been a lot of speculation. Name this object which probably was not sought by the Nazis.

ANSWER: (The Lost) Ark (of the Covenant)

## 10. Biology

Biologically, this name applies to both animals and plants, though commonly it usually applies to plants. As opposed to nekton and benthos, these are water dwellers that are not attached to the sea bottom and cannot move against currents. Most of the animals are less than an inch in size, and the plants are single-celled.

ANSWER: Plankton (do not accept Phytoplankton or Zooplankton)
11. Calculus/Combinatorics (30 Seconds)

Ignore units, but make sure that your answer is positive. Find the area between the graphs of $\mathrm{y}=\operatorname{cosine} \mathrm{x}$ and $y=$ sine $x$ between $x=P i / 4$ and $x=5 P i / 4$.

ANSWER: 2 Root 2

## 12. Nonfiction

Which recent bestseller contains the quote: "First there is shock. Within seconds, shock gives way to disbelief, disbelief to pain, and pain to anger. Finally, anger gives way to a righteous urge to perpetrate an act of criminal damage with the aid of a permanent marker." Written by Lynne Truss, it is subtitled The Zero Tolerance Approach to Punctuation.

ANSWER: Eats, Shoots \& Leaves(: The Zero Tolerance Approach to Punctuation)

## 13. Pop Culture

He always made brief appearances: tossing some litter, winding a clock, sitting next to Cary Grant, missing a bus, or walking two white terriers. His most famous advertisement, used in 1960, was "Don't give away the ending - it's the only one we have!" Name this man responsible for The Lodger, Frenzy, The Trouble With Harry, North By Northwest, Vertigo, The Birds, and Psycho.

ANSWER: (Alfred) Hitchcock

## 14. Physics (30 Seconds)

Find the current through the ten-ohm resistor if a ten-ohm and a five-ohm resistor are connected in parallel with a two-volt battery.

ANSWER: 0.2 (or 1/5) Amperes

## 15. British Literature

Which writer was a critic until he ruined the magazine he worked for by making a libelous comment about Shirley Temple? His best known novel is about a Mexican priest, and other works concern a colonial policeman in Africa just before World War Two and an American in Vietnam before the war there. Name this author of Our Man in Havana, The Heart of the Matter, The Quiet American, and The Power and The Glory.

ANSWER: (Henry Graham) Greene

## 16. American History

To quote Ben Stein: "Did it work? Anyone? Anyone know the effects? It did not work, and the United States sank deeper into the Great Depression." Name this bill which replaced the Fordney-McCumber Act, raising rates to levels that forced other nations to retaliate against us. Named after a Representative from Oregon and a Senator from Utah, it established some of the highest tariffs in United States history.

ANSWER: Hawley-Smoot (Tariff Act) (accept Smoot-Hawley)

## 17. Art/Architecture

Which seventeenth century painter once said, "I would rather be the first painter of common things than second in higher art"? He died soon after portraying the marriage of Louis the Fourteenth. Name this Spanish painter of The Maids of Honor, Woman Sewing, and The Spinners.

ANSWER: (Diego Rodriguez de Silva y) Velasquez
18. Geometry/Trigonometry (10 Seconds)

Rounded to the nearest tenth, what is the sine of 37 degrees?
ANSWER: (0). 6 (accept six tenths)

## 19. Current Events

Who has been labeled by Richard Perle as, "the closest thing American journalism has to a terrorist"? He gained fame working for the Associated Press and New York Times, and he now often writes for The New Yorker. His articles, along with a story by Sixty Minutes Two, publicized the torture which took place at Abu Ghraib in Iraq.

ANSWER: (Seymour) Hersh

## 20. World Literature

This writer has been exiled from his native country several times, and he wrote about his two years in solitary confinement in the book A Man Died. Name this playwright who wrote A Dance of the Forests, Before the Blackout, and Trials of Brother Jero. In addition to Great Britain, he has spent a lot of time in his native Nigeria. He won the 1986 Nobel Prize.

ANSWER: ((Akinwande Olu)wole) Soyinka
Tiebreaker \#1
In 1802 , which chemist noticed that all gases expand their pressure by a factor of $1 / 273$ when heated from zero degrees to one degree Celsius? He came up with the principle which bears his name in 1808. It states that under the same conditions of temperature and pressure, the volumes of reacting gases and of their gaseous products are expressed in ratios of small whole numbers.

ANSWER: (Joseph Louis) Gay-Lussac
Tiebreaker \#2
Though born in Dublin, this writer spent most of his professional career in London. He cofounded the Fabian Society, which attempted to make Britain more Socialist. Many of his plays were first produced in the early twentieth century by Harley Barker. Name this writer of Widower's Houses, Candida, The Devil's Disciple, Saint Joan, and Pygmalion.

ANSWER: (George Bernard) Shaw
Tiebreaker \#3 (No Time Limit)
Unscramble the following letters to get the last name of a President: TONSHAWING
ANSWER: (George) Washington

