## 1. US Literature

This short story begins: "Day had broken cold and grey, exceedingly cold and grey, when the man turned aside from the main Yukon trail and climbed the high earth-bank, where a dim and little-travelled trail led eastward through the fat spruce timberland." A juvenile version was published in 1902, and a more popular version came out in 1908. Name this work by Jack London.

ANSWER: To Build A Fire

## 2. Calculus/Combinatorics (10 Seconds)

The answer is a two-word phrase. It often is necessary to solve a system of equations to use this method, and its primary use is to make certain integration problems easier. The first step, if it is not already done, is to factor the denominator. The next step is to write each factor in a separate denominator with variables used for the numerators. Name this method which in the simplest cases leads to zero degree numerators and first degree denominators.

ANSWER: Partial Fraction(s)

## 3. Music

This musical, the best known work by Robert Meredith Willson, opened on Broadway in 1957. One of the major characters is Winthrop Paroo, who is shy because of the death of his father and has a prominent lisp. The main character falls in love with Winthrop's sister Marian, who is a librarian. Name this musical that takes place in Iowa and features the songs "Till There Was You", "Ya Got Trouble", and "Seventy-Six Trombones".

ANSWER: (The) Music Man
4. Chemistry ( 30 Seconds)
(Note to moderator: $1 s^{2} 2 s^{2} 2 p^{4}$ is pronounced one $s$ two, two $s$ two, two $p$ four.) As an example of electron-configuration notation, you would say that oxygen is $1 s^{2} 2 s^{2} 2 p^{4}$. Give the electron configuration of scandium. Scandium has atomic number 21, so it is just to the right of calcium in a standard periodic table. It is the lightest element to have an electron in a ' $d$ ' orbital.

ANSWER: $1 s^{2} 2 s^{2} 2 p^{6} 3 s^{2} 3 p^{6} 3 d^{1} 4 s^{2}$ (it is acceptable to say $4 s^{2}$ before $3 d^{1}$ )
5. Religion/Mythology

It is debatable whether or not this person existed; according to legend, he wrote down the book he is known for, which is one of the most translated books ever, just before leaving his native country and was never heard from again. Before that, he worked in the Imperial Library. He was a little bit older than Confucius. Name this writer who is credited with the Tao Te Ching.

ANSWER: Lao-tzu (accept Laozi, Laodan, or Laotze)
6. Algebra ( 30 Seconds)

Find the $y$-intercept of the line parallel to the line $y=3 x-8$ that goes through the point $(7,2)$.

ANSWER: -19 (accept (0,-19))
7. World History
(Note to moderator: 'Cadiz' is pronounced Cah-deez'.) The name for this civilization came from Greek and was associated with a color. Its people are credited with founding the city of Cadiz, but that is far from their native land. Their native land was only about twenty miles wide and contained the cities of Sidon and Tyre in what is now Lebanon. Name this group known for its trading and navigating.

ANSWER: Phoenicia(n)
8. Technology

In The United States, this substance is usually used as either ten percent or eighty-five percent of a solution. Arguments against it include the production of volatile organic compounds and the amount of energy required to manufacture it. It is becoming widely available, however, in California and Minnesota, and some people view it as a way our country can achieve energy independence. Name this hydrocarbon that is often combined with gasoline.

ANSWER: Ethanol (prompt Gasohol, Ethyl Alcohol, or Grain Alcohol)

## 9. Pop Culture

She played Joan in Playing by Heart, Kate Libby in Hackers, Olympias in Alexander, and Sara Wayland in Gone in Sixty Seconds. She has two adopted children and recently gave birth in Namibia. This former model won an Oscar for Girl, Interrupted. Name this star of Mr \& Mrs. Smith and Lara Croft: Tomb Raider.

ANSWER: (Angelina) Jolie

## 10. World Literature

Give the first and last name of the character whose life story is similar to the author who created him, is the centerpiece of a 1916 novel, and is a major character in a 1922 novel. A thoughtful boy, he attends Clongowes Wood College until his family runs out of money. He grows to love art and live in Dublin. Name this character created by James Joyce.

ANSWER: Stephen Dedalus (prompt Stephen Hero)

## 11. Biology

This gland, located in front of the cricoid cartilage, contains parafollicular cells that produce and secrete calcitonin. One of the hormones it produces contains iodine, and it gets swollen when there is no iodine in the diet. Name this gland located in the front of the neck.

ANSWER: Thyroid (do not accept Parathyroid)

## 12. Language Arts

This term refers to celebrations mentioned in Chapter Twenty-Five of Leviticus. Because of its associations with the freeing of slaves, it has been appropriated by the African American community and is the title of a Margaret Walker novel and a Cole Porter musical. It also is often used to celebrate anniversaries for monarchs in power, particularly fifty year anniversaries. Give this word beginning with the letter J.

ANSWER: Jubilee(s)
13. Geography/Astronomy/Earth Science

This country contains a large man-made body of water called the Brokopondo Reservoir or the Blommestein Meer. Many of its residents are descendants of immigrants from India, even though the country is not close to India, and it was formerly controlled by Holland. Name this smallest country in South America, located between Guyana and French Guiana, whose capital is Paramaribo.

ANSWER: Suriname (or Sranang)

## 14. Current Events

Attack ads portrayed this politician repeatedly driving a car into a brick wall. At campaign stops, he was often followed by a float showing a kiss he received in 2005. He lost his party's primary but then started a new party and ran in the general election. Name this former candidate for Vice President who is a US Senator from Connecticut.

ANSWER: (Joe or Joseph) Lieberman
15. Geometry/Trigonometry (30 Seconds)

Ignore units. Lines AB and CD are parallel, and lines AD and BC meet at point E , which is between the two parallel lines. If $\mathrm{AB}=6, \mathrm{AE}=9, \mathrm{BE}=10$, and $\mathrm{CD}=8$, then find the length of segment AD.

ANSWER: 21 (Units)

## 16. British Literature

This novel is based on a creation by Basil Hallward. The main character is influenced by a hedonist named Lord Henry Wotton. Published in 1890, it was the only novel written by Oscar Wilde. Name this work in which the title character wishes that his portrait would age rather than him.

ANSWER: (The) Picture of Dorian Gray

## 17. Nonfiction

This work is written as though it is a speech given by a woman. In the last part of her speech, she claims that she is necessary for Christian faith and then refuses to summarize what she has said because she cannot remember it. It was written in 1509 to entertain Thomas More, and the author was embarrassed by its popularity. Name this humanist work by Erasmus of Rotterdam.

ANSWER: (The or In) Praise of Folly (accept Moriae Encomium, Stultitiae Laus, or Lof der Zotheid)
18. Physics (10 Seconds)

This happens to some extent when light is unevenly refracted, when it is reflected by nonmetallic surfaces, or when it is scattered. It is caused to a greater extent by filters with long-chain molecules. It is best demonstrated by rotating one such filter while another filter stays in place. Its existence is used to argue for the theory that light is a transverse wave. Name this property of waves that are all vibrating in the same plane.

ANSWER: Polarized (Light) (accept different word endings)
19. Art/Architecture

He painted several pictures of Salisbury Cathedral in the 1820s. Now considered ahead of his time for painting outdoors and making detailed studies of nature, he was not popular during his lifetime, especially in his native England. Name this painter of The White Horse, The Hay-Wain, and several pictures of Dedham Vale.

ANSWER: (John) Constable

## 20. US History

Union troops referred to this place as Prairie Dog Village. Confederate reinforcements led by General Joseph Johnston never showed up. Lieutenant General Pemberton eventually surrendered to avoid a mutiny by his troops, who by the end were fighting with pretty much no weapons or food. Name this fort under siege from May $18^{\text {th }}$ to July $4^{\text {th }}, 1863$ that gave General Grant control of the Mississippi River.

Tiebreakers: (If you need to replace a question, take one from the Replacement Packet.) Use these questions in the order given if you need to break a tie. The first correct answer wins the match.

Her real name was Margaretha Geertruida Zelle, and she sometimes went by the name Lady MacLeod. Because she was from Holland, which was neutral at the time, she could cross national borders at will. Though her guilt is still debated, she was tried in Paris for sending a message to the Germans and was eventually killed by firing squad. Name this exotic dancer who many people believe was a double spy during World War One.

ANSWER: (Mata) Hari
(30 Seconds)
Solve for $x$ : $(8 / x)-1=(5 / x)$.
ANSWER: 3 (do not accept -3)
Which state contains the towns of Council Bluffs, Ames, Cedar Rapids, Dubuque, and Des Moines?

ANSWER: Iowa

