

## NEW TRIER VARSITY 2008

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### Round 8: Let's See Minnesota Ninja THIS Thread

#### Bonuses

1. (AS) Answer the following about the political impact of the Industrial Revolution on England.

[10] The English government responded to popular unrest amongst the new working classes in part through this law, passed under the government of William Pitt the Younger in 1799. It forbade workers from organizing trade unions for collective bargaining purposes.

ANSWER: the **Combination** Act

[10] As machine-produced goods began to take over their markets, traditional weavers and other craft-workers organized to attack factories. This most famous movement began in 1811, under a name now associated with people who resist technology.

ANSWER: **Luddites**

[10] Published in 1838, the six points of this group led by Fergus O'Connor were demands that would lay the groundwork for universal male suffrage in England. Name this English labor movement, perhaps the first mass labor movement in world.

ANSWER: **Chartism**

2. (DR) Though most general election voting takes place in November, that's not always the case. For 10 points each:

[10] Name the state that had its primaries delayed by Hurricane Gustav to October, had some primary run-offs in November, and then had those seats decided by general elections in December.

ANSWER: **Louisiana**

[10] This Louisiana Congressman was indicted on sixteen corruption charges last year after the FBI raided his home and found ninety thousand dollars in his freezer. He narrowly lost his reelection bid.

ANSWER: William 'Dollar Bill' **Jefferson**

[10] Jefferson lost to this lawyer, who will become the first Vietnamese-American to serve in Congress.

ANSWER: Anh "Joseph" Quang **Cao**

3. (DR) Identify these words beginning with the letter O:

[10] This eight-letter adjective refers to people who are both bad and stubborn.

ANSWER: **obdurate**

[10] This word means to kiss. In mathematics, it refers to curves with at least three points in common and one of its participles refers to circles that are tangent to a curve with the same amount of curvature.

ANSWER: **osculate** (accept word forms)

[10] This verb is a synonym of expatriate and was done in Ancient Greece by popular vote.

ANSWER: **ostracize** (accept word forms)

4. (DR) Computational — pencil and paper ready. Answer the following questions about the graph of  $y$  equals three plus five times the secant of two times the quantity  $x$  minus one-sixth  $\pi$ .

1. [10] The smallest positive  $y$ -coordinate.

2. [10] The smallest distance between the smallest positive  $y$ -coordinate and the nearest vertical asymptote.

3. [10] The smallest positive  $x$ -coordinate of a vertical asymptote. Thirty seconds.

ANSWER 1: **8**

ANSWER 2:  **$\pi$  over 4** or **one-fourth** times  **$\pi$**

ANSWER 3: **5** times  **$\pi$  over 12** or **five-twelfths** times  **$\pi$**

5. (MS) (NOTE TO MODERATOR: Do not say "K. 551" or "Köchel 551" as an answer for part 2. If that answer is given, acknowledge that it is correct and move on.)

Several of this composer's early divertimenti are also known as Salzburg Symphonies. For 10 points each:

[10] Name this composer whose symphonies per se include the *Haffner*, *Linz*, and *Prague*.

ANSWER: Johann Chrysostom Wolfgang Amadeus **Mozart** or Johannes Chrysostomus Wolfgangus Theophilus **Mozart**

[10] This final symphony of Mozart is an arch-classical work of four movements in C major noted for its emotional lyricism and exposition of counterpoint.

ANSWER: *Symphony No. 41 in C major ("Jupiter")*, **K. 551** (accept any underlined part)

[10] This eight-part catalogue assembled in the nineteenth century lists most of Mozart's works and many spuriously attributed to him. The aforementioned *Jupiter Symphony* is 551 in this thematic catalogue.

ANSWER: **Köchel** Catalogue (prompt on **K.** Catalogue)

6. (DR) Given a parametrically-described curve in two dimensions with parameter  $t$ , name the shape that is formed as  $t$  takes on all positive and negative values:

[10]  $x$  equals  $3t$  minus 2 and  $y$  equals  $5t$  plus 7

ANSWER: **line**

[10]  $x$  equals the tangent of  $t$  and  $y$  equals the secant of  $t$

ANSWER: **hyperbola**

[10]  $x$  equals the tangent of  $t$  and  $y$  equals the cosine squared of  $t$

ANSWER: **witch of Maria Agnesi** [ahn YEHS ee]

7. (DR) One thing leads to another, and then another. For 10 points each:

[10] Considered by some people to be the last non-Christian Roman Emperor, he actually received Christian training but hated it. He was the half-brother of Constantine the Great.

ANSWER: **Julian** the Apostate or Flavius Claudius **Julianus**

[10] This man completed a historical novel about Julian in 1964. His other works of historical fiction include *Burr* and *Lincoln*.

ANSWER: Gore **Vidal**

[10] When Gore Vidal was interviewed by this Sacha Baron Cohen character, he was confused with Vidal Sassoon. This character is featured in the movie *Indahouse*.

ANSWER: **Alistair** Leslie **Graham**

8. (JG) Answer the following relating to the Ideal Gas Law for 10 points each.

[10] The Ideal Gas Law is an example of this type of an equation that relates quantities associated with the present condition of matter.

ANSWER: equations of **state** (accept clear knowledge equivalents that include **state**)

[10] A refinement of the Ideal Gas Law was proposed by this Dutch scientist, whose name is also applied to certain intermolecular forces.

ANSWER: Johannes Diderik **van der Waals**

[10] This alternative equation of state for gases is a power series in  $n$  over  $V$ .

ANSWER: **Virial** equation

9. (JP) Computational — pencil and paper ready. Ignore units. Find the areas being described in each of the following parts.

1. [10] The area of a regular hexagon with a radius of twelve, and an apothem of six root three.

2. [10] The area of an annulus that has an outer radius of seven root two and an inner radius of four root two.

3. [10] The area under the curve formed by the quadratic function of  $x$  squared plus two  $x$  plus five, from  $x$  equals one to five. You have thirty seconds.

ANSWER 1: **216** times the square **root** of **3**

ANSWER 2: **66 pi**

ANSWER 3: **256/3** or **85 and 1/3** or **85.33 repeating**

10. (JG) Its creators chose its influences to distinguish it from the Gothic style associated with feudalism. For 10 points each:

[10] Name this American architectural style from the late 18th and early 19th centuries, based on Greco-Roman influences and used in many Washington, D.C. buildings.

ANSWER: **Federal** style (accept reasonable equivalents for "style")

[10] One noted Federal architect was this planner of the University of Virginia's campus and designer of Monticello.

ANSWER: Thomas **Jefferson**

[10] Across the country, this style developed in California, inspired by its namesake religious buildings. It is characterized by clay roofs, long arched corridors, and the use of adobe bricks, and is predominant on the campus of Stanford University.

ANSWER: **Mission Revival** style (accept reasonable equivalents for "style"; prompt on partial answer)

11. (CA) Identify these computer networking protocols, for 10 points each.

[10] The World Wide Web runs on this protocol which identifies resources by URLs, and returns Error 404 if the resource cannot be located, or 200 if everything worked out.

ANSWER: **HTTP** (accept **Hypertext Transport** Protocol)

[10] HTTP requires DNS to resolve domain names like google.com into numerical addresses specified by this protocol, whose version 4 uses sets of four numbers separated by dots, such as 192.168.0.1 [one nine two point one six eight point zero point one] and 127.0.0.1.

ANSWER: **IP** (accept **Internet Protocol**)

[10] IMAP is an updated version of this protocol, which has long been responsible for retrieving emails from a remote mailbox. It is named after a corresponding method for snail mail, and its version 3 is supported by virtually all email clients.

ANSWER: **POP** (accept **Post Office Protocol**)

12. (RS/JG) Its namesake wrote about it in "A Tract About Some Qualities of Common Water", and it is observed when a piece of dry ice is placed on a hot plate: the dry ice does not make contact with the surface, and floats above it. For 10 points each:

[10] Name this effect, which is responsible for droplets of water dancing around in a hot pan because an insulating layer of vapor forms.

ANSWER: **Leidenfrost** effect

[10] This other effect is observed when current is passed through a conductive plate which is placed between the north and south poles of a magnet: a difference in EMF forms on the sides of the plate.

ANSWER: **Hall** effect

[10] This effect is observed when a current is passed through a conductor: the area in contact with the positive lead is not the same temperature as the area in contact with the negative lead.

ANSWER: **Thomson** effect

13. (JG) Name some things related to the Vietnam War for 10 points each:

[10] This 1964 law was passed in response to a torpedo attack in a certain body of water. Only senators Wayne Morse and Ernest Gruening voted against it.

ANSWER: **Gulf of Tonkin** resolution (prompt on **Southeast Asia** Resolution or **Tonkin** Resolution)

[10] The Gulf of Tonkin resolution followed that attack on this ship, a destroyer that was not, in fact, destroyed in the incident.

ANSWER: U.S.S. **Maddox** DD-731

[10] Six years later, this other shooting incident occurred eight thousand miles away. Students were actually protesting an invasion of Cambodia when four of them were killed and nine wounded.

ANSWER: **Kent State** massacre (accept reasonable equivalents for "massacre")

14. (JG) Viruses suck, particularly certain African ones. Name these hemorrhagic fever-inducing viruses that will pretty literally suck all the precious bodily fluids out of you.

[10] Named after the river where the first recognized infections occurred, it was first observed in Zaire and the Sudan in 1976 and has also been seen in gorillas.

ANSWER: **Ebola**virus

[10] This virus is believed to be transmitted through feces and urine, primarily those of rodents. It was first found in 1969 on the south end of Lake Chad, in Nigeria.

ANSWER: **Lassa** virus

[10] This mercifully rare virus first broke out in three different labs on three different continents in 1967. Fruit bats seem to be a reservoir for it, and it seems to be native to Uganda and western Kenya. It is very similar to ebola.

ANSWER: **Marburg** virus

15. (JG) For 10 points each, name these things related to a Victorian poem that takes place on the shore of the English Channel and in which the speaker asks his love to "let us be true/To one another!".

[10] This is the name of the poem.

ANSWER: "**Dover Beach**"

[10] This British poet wrote "Dover Beach" along with "Empedocles on Etna" and had some really awesome sideburns.

ANSWER: Matthew **Arnold**

[10] This other Arnold poem tells of a Oxford man who got sick of the academic lifestyle and left to become a hobo.

ANSWER: "The **Scholar-Gipsy**"

16. (DR) Her real name is Agnes, but she is better known by a nickname based on a piece of jewelry she wears. For 10 points each:

[10] Name this character who falls in love with Captain Phoebus.

ANSWER: La **Esmerealda**

[10] This character from a different novel has the real name Euphrasie, and she falls in love with Marius. Name this character cared for by Jean Valjean [ZHAN val-ZHAN].

ANSWER: **Cosette**

[10] Esmerelda and Cosette appear in *The Hunchback of Notre Dame* and *Les Misérables*, respectively, both of which were written by this author.

ANSWER: Victor-Marie **Hugo**

17. (JG) Given a quote from *Casablanca* that made the American Film Institute's list of "100 Years—100 Movie Quotes", identify the character who said it

[10] "Here's looking at you, kid."

ANSWER: **Rick Blaine** (accept either name or both names)

[10] "Play it, Sam. Play 'As Time Goes By'."

ANSWER: **Ilsa Lund** (accept either name or both names)

[10] "Round up the usual suspects."

ANSWER: Captain Louis **Renault**

18. (TB) Tom Wolfe's books are often extremely long, but many times they are also worth reading. For 10 points each, give the following about some of his works:

[10] This novel centered around Wall Street in the 1980s and was eventually made into a horrible movie starring Tom Hanks.

ANSWER: *The **Bonfire of the Vanities***

[10] This titular character struggles to maintain her innocence in her first year at Dupont University in Wolfe's most recent work.

ANSWER: **Charlotte Simmons**

[10] This nonfiction work chronicles the lives and stories of the Mercury Seven space shuttle crew.

ANSWER: *The **Right Stuff***

19. (JP) Given the following extraterrestrial geologic features, identify the heavenly body on which they are found.

[10] Ishtar Terra, Beta Regio, and Maat Mons

ANSWER: **Venus**

[10] Marius Regio, Galileo Regio, and the Osiris Crater

ANSWER: **Ganymede**

[10] Hellas Planitia, Arabia Terra, and Olympus Mons

ANSWER: **Mars**

20. (JG) Located just south of Mali and northeast of the Côte d'Ivoire [COH div WAH], its current president is Blaise Compaoré [BLAYZ cohm pow RAY]. For 10 points each:

[10] Name this west African country with capital at Ouagadougou [wah gah DOO goo].

ANSWER: **Burkina Faso**

[10] Burkina Faso used to be called by this name, reflecting that it contained the northern part of a river that drains into the Gulf of Guinea.

ANSWER: Republic of **Upper Volta**

[10] The Volta River also flows through this country with a name meaning "Warrior King", one of the more developed west African countries. It used to be the location of the Ashanti empire.

ANSWER: Republic of **Ghana**