

**TOSSUPS – ROUND 4 (UTC A)**

**SWORD BOWL 2003 -- UT-CHATTANOOGA**

Questions by John Kilby, Nikki Poarch, Wally Edmondson, Sarah Pross, and Charlie Steinhice with help from DePauw (Stan Jastrzebski, Sarah Mordan-McCombs, James McQuiston and Amanda Hartman) and Maryland

1. A former surveyor, this scientist pointedly asserted he had not defiled himself when in November 1677 he reported to the Royal Society his observations of spermatozoa. He also was the first to observe red blood cells and bacteria. FTP, name this father of protozoology who accomplished all this using his homemade microscopes.

Answer: Antonie van **Leeuwenhoek**

2. The first and last stanzas of this poem are almost identical, save for the last line. That is interesting from a language perspective, as the poem tries to reckon with the title creature's "fearful symmetry." More specifically, the poet tries to figure out what "immortal hand or eye" could have created such a beast. FTP, name the animal that burns bright in the forests of the night and you've named the William Blake poem.

Answer: **"The Tiger"**

3. This member of the National Academy of Engineering and Fellow of the IEEE received the National Medal of Technology from President George Bush in 1990. He co-founded Intel in 1968 and over the years has served successively as Executive Vice President, Chairman, CEO, President and currently Chairman Emeritus of the microprocessor giant. FTP, name this famous computer scientist, best known for his assertion that the transistor density of a chip doubles every couple of years.

Answer: **Gordone E. Moore** (Note: Some smartass will say that his law says every 18 months. Moore revised his prediction in 1995 to make it 24 months instead of 18, so there.)

4. The main character of this piece of music is hopelessly in love with a woman. That's not surprising since the composer too was hopelessly in love with a woman, specifically Harriet Smithson, when he composed it. It consists of five movements: *Reveries, Passions, A Ball, In The Country, March to the Scaffold*, and *Dream of a Witches' Sabbath*. FTP, name this symphony by Hector Berlioz.

Answer: **Symphonie Fantastique (or Fantastic Symphony)**

5. When Alexander the Great's troops invaded India circa 305 B.C., this man declared war on Selucus Nictator, the Macedonian ruler of the Northern part of the country. He proceeded to sack Punjab, Kabul, Khandahar, Gandhara and Persia and then take his rival's daughter in marriage. He initiated a service system, but rarely left his castle. Some Jainist traditions even suggest he abdicated the throne and fasted to death. FTP, who is this grandfather to Ashoka, the first ruler of the Maurya Dynasty?

Answer: **Chandragupta**

6. He is in the *Guinness Book of World Records* for having the longest entry of "Who's Who In America." When NPR asked various Nobel recipients what their favorite book was, he answered *Arrowsmith* by Sinclair Lewis. From 1961 to 1971, he served as the chairman of the U.S. Atomic Energy Commission. FTP, name this scientist, the expert on artificially creating transuranic elements, whose namesake element is number 106.

Answer: **Glenn T. Seaborg**

7. A subdivision of the main company now handles electronic security solutions, which is a far cry from when ~~the~~ company's big technological innovation was the mug shot. The company's founder did poor work as an intelligence officer for George McLellan, but hardly anyone noticed because in 1861 he'd foiled a plot to assassinate McLellan's boss, Abraham Lincoln. Name that man and you've named, FTP, this company that never sleeps, the first detective agency in the United States.

Answer: **Pinkerton Detective Agency**

8. On November 28, 1912, he gave up his job as president of a manufacturing company that made the "Roof-Fix Cure for Roof Troubles" to focus on his writing career. In such 1930's works as *Beyond Desire* and *Death in the Woods and Other Stories*, he wrote about labor conditions in the South, but he's better associated with his native Ohio. FTP, name this master of the short story who gained wide recognition in 1919 with *Winesburg, Ohio*.

Answer: **Sherwood Anderson** (prompt on Anderson, but not on Sherwood)

9. One of his earliest acts as fully ruling king was to remove Nicolas Fouquet (foo –KAY) and replace him with Jean Colbert (col – BAYR). He took full rule after his regent, Cardinal Mazarin, died in 1660, and soon started the War of Devolution, which preceded the Wars of the Grand Alliance and Spanish Succession. All this while revoking the Edict of Nantes and building Versailles (ver – SY). Known as the “Sun King,” FTP, name this longest-reigning king of France.

Answer: **Louis XIV** (can be pronounced “Louis Quatorze”; be charitable and accept the **Sun King**)

10. His name means to “inscribe brightly,” and that he has done. He received his bachelor of architecture from MIT in 1940 and left school to volunteer for the National Defence Research Committee in 1944. He opened his own firm in 1955 and has since went on to design many great buildings, in the process winning him the Pritzker Architecture Award in 1983. FTP, name this architect ~~ure~~ who is responsible for the John F. Kennedy Library, the Bank of China, and the Rock and Roll Hall of Fame and Museum.

Answer: **Ieo Ming Pei**

11. Introduced into English verse by Thomas Wyatt in the 16<sup>th</sup> Century, this form was quickly picked up by Shelley and Byron, among others. The preferred meter to a poem exhibiting this quality is iambic pentameter in English, but even Dante’s *Divine Comedy* is written in it. In general, the second line of a stanza rhymes with the first and third lines of the following stanza. FTP, what is this Italian term for these rhyming triplets or *tercets*?

Answer: **Terza Rima**

12. A childhood bout with appendicitis gave him the opportunity to study up on many natural history books. His *Heredity In Poultry* described the work he did with controlling the male poultry population during World War I. He also worked with butterfly mimicry, the idea that one species mimics another in order to gain an adaptive advantage. FTP, name this geneticist who devised a graphical method of representing hybrid crosses.

Answer: **Reginald Punnett**

13. The second collaboration between the artist and producer Clive Davis, it follows the same formula as the first. P.O.D. helps out on the song “America”, Nickelback frontman Chad Kroeger supplies the vocals for “Why Don’t You and I”, and Placido Domingo even lends his stylings to the album’s final track. FTP, what is this follow-up album to “Supernatural” which features the hit collaboration “The Game of Love” with Michelle Branch, Carlos Santana’s latest offering?

Answer: **Shaman**

14. You may not think you have heard of Hottinguer, Bellamy, and Hauteval, but you probably have. They negotiated with Elbridge Gerry, John Marshall, and Charles C. Pinckney, who were sent by the president to prevent any conflict resulting from the failed talks Pinckney had with France during George Washington's presidency. FTP, name this diplomatic disaster that had its foundation with the angry French response to Jay's Treaty and occurred during the presidency of John Adams.

Answer: **XYZ Affair or XYZ Correspondence**

15. It was advocated by John Rawls in *A Theory of Justice*. It causes people in an environment to agree to a certain income distribution because they do not know how they would fare if it were to be removed. FTP, give the name of this imaginary curtain behind which a person does not know where they stand in the income distribution of society.

Answer: **Veil of Ignorance**

16. Bernard Knox writes that “she is from the same mold as her husband, a worthy partner and adversary.” She matches him in cunning and intelligence, as seen in how she keeps the persistent Antinous and Eurylochus and other suitors at bay. Her slickest move involved weaving a death shroud at her loom and unweaving her work every night. FTP name this supporting character from Homer’s *Odyssey*, the long-suffering wife of Odysseus.

Answer: **Penelope**

17. Snell's Law is useful in explaining the property. The angle at which this occurs is the inverse sine of the quotient of the indices of refraction for the two environments, which is also known as the critical angle. Polarizing prisms often make use of this property. FTP, name this optical phenomenon that explains why diamonds sparkle and has applications with fiber optics.

Answer: **Total Internal Reflection**

18. QUOTE: "'It's really an awfully simple operation, Jig,' the man said. 'It's not really an operation at all.'" This line gives the clue to the reader that this short story is really about an abortion. Much of the story consists of short lines of dialog, much of it inconsequential from a plot standpoint. FTP, name the title that describes a metaphor a girl uses with the American in an Ernest Hemmingway short story.

Answer: **"Hills Like White Elephants"**

19. A sequel to this game was recently announced by Konami of America and will be released in the fall. It adds ONI mode and freeze arrows to the mix and features new songs like "Sandstorm," "I Like To Move It," and "Ordinary World." FTP, name this domestic PlayStation 2 release of Konami's popular arcade dancing game.

Answer: **DDR MAX: Dance Dance Revolution** (accept either DDR MAX or Dance Dance Revolution 'cause we're nice people)

20. As a member of the American First Army, he was assigned the task of taking on the Germans from the Argonne Forest in World War I. Somehow, he was able to kill 20 enemy soldiers while taking 132 prisoners and 35 machine guns. This led to him receiving the French Croix de Guerre and the Congressional Medal of Honor. FTP, name this Tennessee sergeant played in Gary Cooper in a 1941 film.

Answer: **Alvin C. York**

21. The eldest of six children, he was born in New Haven, Connecticut in 1903. He attended Yale and even was a member of a gold medal winning US rowing team in 1924. He studied medicine at Yale and then went on to complete his study at Columbia, but realized that he must understand family dynamics to get a better idea of how to raise and treat children, so he began to study psychoanalysis, as well. FTP, who is this pediatrician whose book *The Common Sense Book of Baby and Child Care* has sold over 50 million copies?

Answer: **Benjamin Spock**

22. This molecule comes in four types, the most highly studied of which is type I. Type I is a 97 kiloDalton protein containing three zinc atoms near it's carboxyl end, and is studied primarily in *E. coli*. Aside from its main functions, type I also acts to join single stranded rings of DNA to form double stranded rings, and knot and unknot DNA. Type II requires ATP to make double stranded cuts, but type I does not. FTP, what is this type of enzyme, important for regulating negative supercoiling during replication of DNA through single and double strand cuts?

Answer: **topoisomerase**

23. She began her writing career with two very standard works, *The Voyage Out* and *Night and Day*. After that, she began experimenting with stream of consciousness writing and eventually published the short story collections *Monday or Tuesday* and *A Haunted House*. After helping to found the Bloomsbury group with her sister, she published more famous works like *Jacob's Room* and *Mrs. Dalloway*. FTP, who is this writer who also penned seminal works like *To The Lighthouse* and *A Room of One's Own*?

Answer: **Virginia Woolf**

**BONI – ROUND 4 (UTC A)****SWORD BOWL 2003 -- UT-CHATTANOOGA**

Questions by John Kilby, Nikki Poarch, Wally Edmondson, Sarah Pross, and Charlie Steinhice with help from DePauw (Stan Jastrzebski, Sarah Mordan-McCombs, James McQuiston and Amanda Hartman) and Maryland

1. If you're running for President, it sure helps to have a powerful Johnson. Answer the following FTPE:
  - a) Before Lincoln and Kennedy, who were succeeded by their respective Johnsons, this man was the first to have a Vice President named Johnson (Richard, to be specific.) He won in 1836 but lost his 1840 reelection bid.  
Answer: **Martin Van Buren**
  - b) Despite having Herschel Johnson as his running mate, this Democrat lost to archrival Lincoln in 1860.  
Answer: **Stephen Douglas**
  - c) Hiram Johnson was the running mate in 1912 of this candidate, who is the only third-party candidate to finish as high as second since the Civil War.  
Answer: **Theodore Roosevelt**
2. **VISUAL BONUS [READER, HAND OUT ATTACHMENT A]** Given the following C++ methods, identify whether they exemplify iteration, recursion, both, or neither FTPE.  
Answers: **A. Neither**  
**B. Recursion**  
**C. Iteration**
3. January is a time when movie studios release films whose OSCAR hopes are... shall we say, slim at best? FTP, name these not-so critically acclaimed movies that came out this month:
  - a) "Boy meets girl. Boy meets girl's cousin." is the tagline for this film that one IMDb user called "Scriptless In Seattle." It stars Selma Blair, Jason Lee, and Julia Stiles.  
Answer: **A Guy Thing**
  - b) In this Jerry Bruckheimer-produced movie, two childhood friends get caught up with the mob and must deliver \$100,000 to Australia. Unfortunately for them, they lose the money to the titular kangaroo. Hilarity allegedly ensues.  
Answer: **Kangaroo Jack**
  - c) From the director of "Big Daddy" and "Saving Silverman" comes this action/comedy about two L.A.P.D. rejects Hank and Earl, portrayed by Steve Zahn and Martin Lawrence respectively.  
Answer: **"National Security"**
4. Answer the following about particle physics FTPE:
  - A. This man, who shared the 1933 Nobel in Physics, pioneered the study of antimatter as a consequence of the 1928 publication of his version of quantum mechanics.  
Answer: **Paul Dirac**
  - B. First found to be of extraterrestrial origin by Victor Hess in 1912, these are high energy particles from outer space which hit the Earth's atmosphere and in the process produce huge showers of lower energy particles.  
Answer: **cosmic rays** (accept it if they narrow it further by saying "primary cosmic rays")
  - C. Antiparticles could be discovered by working with cosmic rays in this "room," a detector filled with a gas close to its condensation point, where the ionizing particles' trajectories materialize in the form of tracks made of droplets.  
Answer: **Cloud chamber**
5. **THE NEWLY DEAD GAME:** The film career of Richard Harris, who died in Oct. 2002, included roles in several adaptations of notable literary works. Given a work on Harris' résumé, name the author or authors FTPE or 30 for all 5:
  - a) *The Count of Monte Cristo*  
Answer: **Alexander Dumas** (*pere*; don't have to prompt, but do not accept "Dumas fils")
  - b) *The Pearl*  
Answer: **John Steinbeck**
  - c) *Gulliver's Travels*  
Answer: **Jonathan Swift**
  - d) *Tarzan, the Ape Man*  
Answer: **Edgar Rice Burroughs**
  - e) *Mutiny on the Bounty*  
Answer: **Charles Nordhoff and James N. Hall**



6. **VISUAL BONUS [READER, HAND OUT ATTACHMENT B] THE NEWLY DEAD GAME, CLASSIC**

VERSION: I see dead people. Given famed paintings of newly dead bodies, name the work F5PE and the artist for 5 more:

Answers:

- 1) The **Death of Marat** by Jacques Louis **David**
- 2) The **Gross Clinic** by Thomas **Eakins**
- 3) The **Third of May, 1808** by Francisco de **Goya**

(also accept: **May 3, 1808, The Shootings of May Third 1808** or **The Executions of the Third of May, 1808**)

7. Identify these protists for ten points each.

[10] These protists never have undulipodia at any point in their life cycles. They move by using flowing cytoplasmic extensions called pseudopods.

Answer: **amoebae**

[10] These have a radial groove that contains one flagellum, and a second is used for locomotion. They can also create "red tides" which are poisonous to fish.

Answer: **dinoflagellates**

[10] These have shells called tests which are made of two parts, with intricate, symmetrical patterns. Their fossilized shells are mined for use in abrasives, filters, chalk, and talc.

Answer: **diatoms**

8. Name these vessels featured in Herman Melville's works FTPE:

A: The ship that carried Ishmael, Queequeg, and Captain Ahab in *Moby Dick*

Answer: **Pequod**

B: Also in *Moby Dick*, this ship is searching for a lost sailor, the captain's son, and Ahab refused to help because they had no information about Moby Dick. Eventually this ship picked Ishmael up after Moby Dick destroyed the Pequod.

Answer: **Rachel**

C: Edward Vere was captain and John Claggart was master-at-arms of this British warship, which proved less than hospitable for a young foretopman named Billy Budd.

Answer: **Bellipotent**

9. Identify the Supreme Court cases from clues, FTPE.

A. This 1824 case defined Congress's right to regulate commerce based on a suit between two rival steamboat companies, one with a federal license, and one with a state license.

Answer: **Gibbons v. Ogden**

B. In this 1857 decision finding the Missouri Compromise unconstitutional, three Justices added fuel to the fire by stating that African-Americans whose ancestors were sold as slaves weren't citizens and had no legal standing to sue anyway.

Answer: **Dred Scott v. Sandford** [it should have been spelled Sanford but the Court blew *that* too]

C. The court ruled that race could be a factor in admissions, in this case to a medical school, but that the school could not impose rigid quotas. The court ruled that affirmative action could only improve opportunities for minorities if it didn't hurt the rights of the majority in the process.

Answer: **Regents of the University of California v. Bakke**

10. **VISUAL BONUS [READER, HAND OUT ATTACHMENT C] Even without Texas, there are over thirty countries with only one star on their flag. Name the countries that fly each of these flags FFPE.**

Answers: 1. **North Korea**; 2. **Cuba**; 3. **Vietnam**; 4. **Ethiopia**; 5. **Israel**; 6. **Chile**

11. Besides being a great anthropologist in his own right, Franz Boas had some pretty remarkable students in his program at Columbia. Given one or more works, name the Boas protégé who wrote them FTPE:

a) *Culture and Commitment* and *Coming of Age in Samoa*

Answer: **Margaret Mead**

b) *The Chrysanthemum and the Sword* and *Patterns of Culture*

Answer: **Ruth Benedict**

c) *Mules and Men* and *Their Eyes Were Watching God*

Answer: **Zora Neal Hurston**

12. FTPE name these women from Aeschylus' *Oresteia*:

a) The mother of Orestes, she and her lover Aegisthus killed her husband Agamemnon, for which Orestes eventually killed them both.

Answer: **Clytemnestra**

b) This sister of Orestes helped him and his sidekick Pylades carry out the hit on Clytemnestra.

Answer: **Electra**

c) Another sister of Orestes, she helped him steal the sacred image of Artemis from Tauris to win expiation from the Furies.

Answer: **Iphigenia**

13. It relates the luminosity of a star to its surface temperature. 10 points per part.

[10] Name this important diagram in astronomy.

Answer: **H-R (or Hertzsprung-Russell) diagram**

[10] Ninety-five percent of all stars lie along what region that runs from upper left to lower right?

Answer: **main sequence**

[10] For 5 points for four correct, or 10 for all seven, give in any order the one-letter names for the seven spectral classes sometimes depicted along the x-axis of an H-R diagram. (And no fair guessing more than seven.)

Answer: **O, B, A, F, G, K, M**

14. It's good to be the king, but only sometimes. Name these 19<sup>th</sup> century Latin American monarchs FTPE:

[10] Napoleon III convinced this brother of Franz Joseph of Austria to become Emperor of Mexico; he was executed by liberal Mexican forces in 1867.

Answer: **Maximilian**

[10] This son of King John VI remained in Brazil as prince regent when his father reclaimed Portugal's throne in 1821. The next year he declared Brazil an independent monarchy.

Answer: (Dom) **Pedro I**

[10] He conspired to murder Jean Jacques Dessalines [day-suh-LEEN]; in 1811 he declared himself king of all Haïti. Nine years later, under siege, he committed suicide.

Answer: **Henri Christophe** [kree-STOFF]

15. FTPE, answer the following about an opera:

10: This four-act opera, originally produced in collaboration with Robert Wilson, premiered in Avignon in 1976. It lasts five hours and contains five "knee" plays. FTP, name it.

Answer: **Einstein On The Beach**

10: Name the composer of *Einstein On The Beach*

Answer: **Philip Glass**

10: "Einstein On The Beach" is the first part of Glass's *Portrait Trilogy*. FTP, name either of the other two.

Answer: either **Satyagraha** or **Akhmatov**

16. FTPE, given an acclaimed American short story with a female title character, name the author:

a) "Bernice Bobs Her Hair"

Answer: **F. Scott Fitzgerald**

b) "Rappaccini's Daughter"

Answer: **Nathaniel Hawthorne**

c) "The Jilting of Granny Weatherall"

Answer: **Katherine Anne Porter**

17. Name these things associated with St. Augustine, 10 points per answer.

[10] Augustine was bishop of what city in modern-day Algeria?

Answer: **Hippo (Regius)**

[20] In one of his two best-known works, he refutes claims Christianity caused the sack of Rome; in the other, he looks at his journey to becoming a Christian. Name these two books FTPE.

Answer: **The City of God** and **The Confessions**

18. It's time for everyone's favorite question...insect orders! Identify the order from members, F5PE or 30 for all correct.

A. termites

Answer: **isoptera**

B. fleas

Answer: **siphonaptera**

C. ants, bees, and wasps

Answer: **hymenoptera**

D. butterflies

Answer: **Lepidoptera**

E. beetles

Answer: **coleoptera**

19. Identify the Roman Emperor, 30-20-10.

A. 30 – His mother and father were both of equestrian status. They were often away from home for work, so he was primarily educated by his paternal grandmother, Tertulla. His path was set to eventually lead to the position of praetor under the emperor at the time, Gaius.

B. 20 - During his reign, he encouraged rebuilding on vacated lots, restored the Capitol, and also began work on several new buildings which included a temple to the deified Claudius on the Caelian Hill, a project designed to identify himself as a legitimate heir to the Julio-Claudians, while distancing himself from Nero.

C. 10 - He died on June 23, AD 79, after a short illness. It is said that his last words were "Oh my, I must be turning into a god!"

Answer: **Vespasian**

20. It connected Asgard, Misgard, and the underworld. 10 points each.

[10] Name this World Tree of Norse myth.

Answer: **Yggdrasil** [IG-druh-sil]

[10] Name the squirrel who ran around Yggdrasil, spreading discontent.

Answer: **Ratatosk**

[10] Odin hung himself from Yggdrasil for nine nights to gain knowledge of what magical symbols?

Answer: **runes** [Insert autoerotic asphyxiation jokes here.—Ed.]

21. Identify these former Oprah Book Club selections from a plot synopsis for 15 points, five if you need the author.

(15) The narrator places this novel in India during the middle years of the 1970s. A State of Emergency is announced by the Indian government, and the nation falls into utter chaos. The action of the novel takes place between four people completely unfamiliar with each other, forced into a much too small apartment.

(5) Rohinton Mistry

Answer: **Fine Balance**

(15) Centered around an African American family in Georgetown during the middle of the 1920's, Johnnie Mae longs to get into the Volta Place pool, which is whites-only. She tries to save Clara from drowning, but cannot, and becomes a classical anti-hero.

(5) Breena Clarke

Answer: **River, Cross My Heart**

22. Answer these questions about Saints in the Catholic Church FTSNOP.

(5) He is best known for the celebrated "ontological argument" for the existence of God in chapter two of the *Proslogion*.

Answer: Saint **Anselm**

(10) She was a Vestal Virgin, who, August 11<sup>th</sup>, 290, was decapitated by Diocletian, who was her uncle. She was beheaded because she stood for her beliefs, and did not break her chastity vows as ordered by Diocletian, who wished her to marry M. Galerius, his adopted son.

Answer: Saint **Susanna**

(15) During the times of the most heavy plague, this man and one of his followers were seen as saved. He may be better known for ordering the Codex Amiatinus to be created, which is the oldest extant one-volume copy of the Vulgate, and for also training the Venerable Bede.

Answer: Saint **Ceolfred**

23. Given the year that the book was given the medal and the author that penned it, give the title Caldecott-winning book FTPE.

(10) 2002, David Weisner

Answer: **The Three Pigs**

(10) 1982, Chris Van Allsburg

Answer: **Jumanji**

(10) 1973, Arlene Mosel

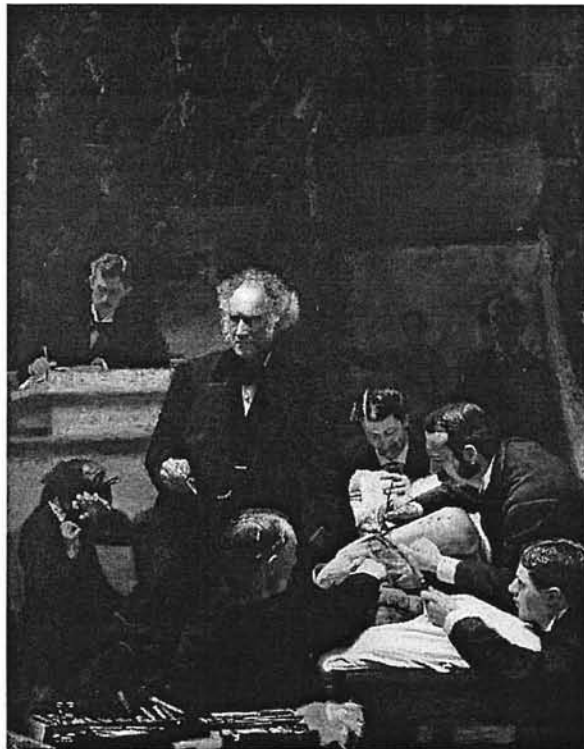
Answer: **The Funny Little Woman**



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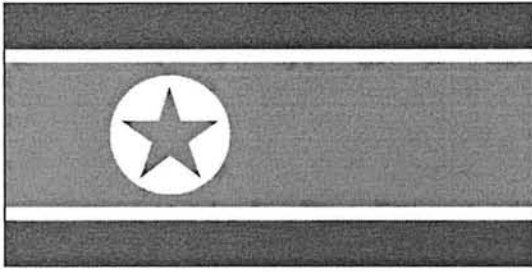
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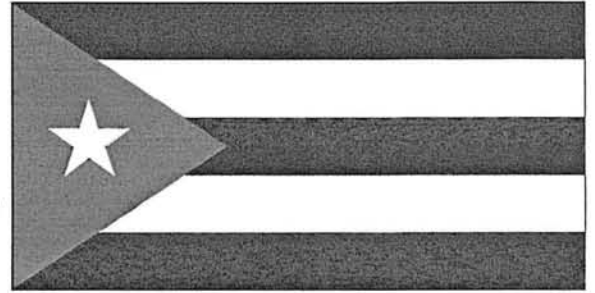
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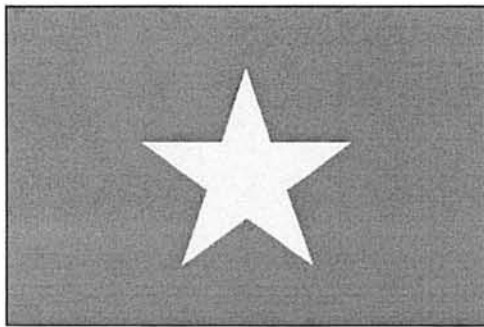
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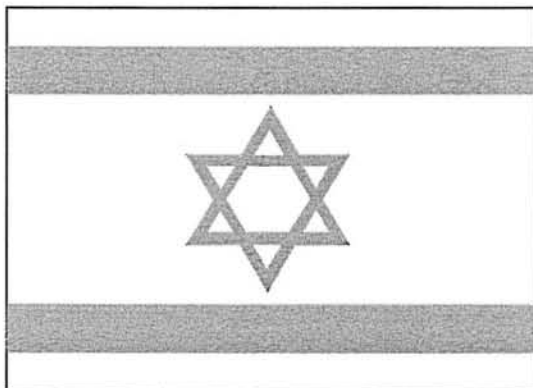
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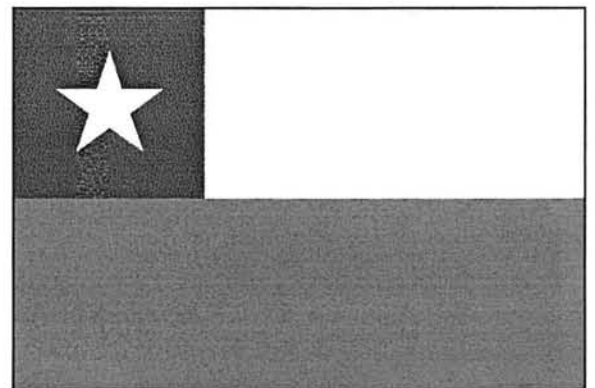
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5.



6.



# UTC ROUND – SWORD BOWL 2003

## ATTACHMENT A: BONUS #

A:

```
void method1()  
{  
    int x = 5;  
    x += 2;  
    cout << x;  
}
```

B:

```
int method2(int x)  
{  
    if (x > 10)  
        return 1;  
    else  
    {  
        x ++;  
        return method2(x) + 1;  
    }  
}
```

C:

```
int method3()  
{  
    int x = 2;  
    while (x < 10)  
        x *= 2;  
    return x;  
}
```