

### Kidder Cup 2003

Packet by Sudheer Potru (with tossup and bonus 1 written by Nate Meyvis, who sadly could not be here due to illness but asked me to include two questions for him)

#### Tossups

1. The 10th anniversary DVD of this movie features a Michael Jackson music video. Nils Oien caused a controversy when he claimed that one of its main characters should be killed; less remembered characters include Dwight Mercer, Glen Greenwood, Randolph Johnson, and the protagonist, Jesse. Spawning two sequels, "The Adventure Home" and "The Rescue", for 10 points, name this kids' movie starring Keiko, a killer whale, and the attempts to release him from captivity.

Answer: Free Willy

2. His namesake coils are used to provide a uniform magnetic field for studying the magnetic properties of matter, and he formulated the trichromatic theory of color vision independently of Young. His paper "On the Conservation of Force" provided the first clear statement of the conservation of energy, but he may be most famous for his work in thermodynamics. FTP, internal energy minus temperature times entropy is the namesake free energy of what German scientist?

Answer: Hermann von Helmholtz

3. Friedrich von Schiller wrote a series of poems to a woman of this name, and Byron used it for the Venetian lady who marries his title character Beppo. Also a major character in Kate Chopin's *Tales of Acadie*, perhaps the most famous incarnation was supposedly married to Hugues de Sede, and she is the subject of both the *Rime* and *Canzoniere*. FTP, give the common name of all these literary characters, one of whom was the beloved of Petrarch.

Answer: Laura

4. Preceded by the burning of more than 1,500 farmhouses, one of its generals advanced to within two miles of Anse au Foulon, taking advantage of a distraction provided by James Abercromby and Jeffery Amherst. The guarding sentries let the so-called 'supply' boats through, and on the morning of September 13, Montcalm woke to find the Plains of Abraham full of British troops under James Wolfe. FTP, name this 1759 battle, in which the British nearly ended threats of New France.

Answer: Battle of Quebec

5. First published in 1970, Part II of this work discusses economic impermanence and resistance to change in modern society. Part I recognizes the inevitable break with the past that will take place, and Part V, titled "The Limits of Adaptability", discusses both the physical and psychological dimensions of the title concept, which results from an inability to cope with extensive technological advancement. FTP, name this magnum opus of sociologist Alvin Toffler.

Answer: Future Shock

6. Its three areas jutting outward on the north, west, and south, are known as Tonjona Bobaomby, Vilanandro, and Vohimena, respectively, and the Cape Sainte-Marie lies on its east side. The cities of Vangaindrano and Toliara are located near the Tropic of Capricorn, while larger cities include Mahajanga. Just southeast of the Comoros Islands and surrounded by the IndiaIndiannd Mozambique Channel, FTP, name this island with capital at Antananarivo.

Answer: Madagascar

7. In the Mahabharata, he appears in the form of a beggar to take the armor of Karna and sends his charioteer Maatali to help his son Arjuna in battle. His insult of Brihaspati caused the brief rise of

Nahusha, and at the beginning of time, it was he who slew Ahi, or Vritra, restoring cosmic order to the universe, after which he rode triumphantly on his white elephant Airavata. FTP, name this god of storms and of war, generally recognized as the king of the pantheon of lesser gods.

Answer: \_Indra\_

8. Taking place in Greece, Scotland, and Greenwich Village, it focuses generally on three characters as they interact over a decade. The emotionally intense Marjorie has a major impact on the young artist Fern Olitsky, who in turn is affected by Fenno MacLeod, a gay bookstore owner in New York City. The development of the family is illustrated, however, when Fenno speaks to his father Paul, the hero of the first section of the novel. FTP, name this 2002 National Book Award-winning novel by Julia Glass.

Answer: \_Three Junes\_

9. Tim Cole was his general project manager. Luc Trullemans, his chief meteorologist, would evaluate weather, and tell him what spots to avoid. Joe Ritchie headed up the Mission Control center in St. Louis for his project, and after five unsuccessful tries, he finally accomplished his goal on July 2, 2002 while on the Bud Light Spirit of Freedom. FTP, name this businessman, who completed the first circumnavigation of the globe in a hot-air balloon.

Answer: \_Steve Fossett\_

10. Affecting roughly two out of every 1000 African-Americans, the distribution of its allele in Africa coincides closely with that of *falciparum* malaria, and it results from a substitution of a nonpolar valine for a hydrophobic glutamic acid near the oxygen-binding site on a hemoglobin molecule, producing long fibrous clumps. FTP, name this hereditary disease, notable for its elongated red blood cells that look like a weapon.

Answer: \_sickle-cell anemia\_

11. Created originally for a pension celebration of newspapermen, it was first set to words by the opera singer Waino Solo in 1937. Two years later, however, V.A. Koskenniemi wrote another set of lyrics that became official. Composed in 1899, perhaps its most representative section comes at the end, when the trumpets are at their loudest, portraying exactly what it is supposed to: patriotism. FTP, name this tone poem, perhaps the most famous work of Jean Sibelius.

Answer: \_Finlandia\_

12. The ambassador Megasthenes visited his palace, reporting it to be "great beyond all belief" just shortly after he defeated Mahapadma, ruler of the Nandas. A long political treatise with advice to his descendants is attributed to his chief minister Kautilya, and his son Bindusara retained the capital at Pataliputra even after his death in 286 BCE. FTP, name this grandfather of Ashoka and founder of the Mauryan empire.

Answer: \_Chandragupta Maurya\_

13. After their major decentralization, they were joined by Andrew Lytle and Laura Riding. Rejecting the free movement of imagism, they instead embraced the classicism of T.S. Eliot. In the symposium *I'll Take My Stand*, they supported the traditionalist Southern society, and their work at Vanderbilt University helped to form the school of New Criticism. FTP, name this 1920s poetic movement including Allen Tate, John Crowe Ransom, and Robert Penn Warren.

Answer: \_The Fugitives\_

14. In nematodes, this process is governed by the genes *ced-3*, *4*, and *9*, and in humans, the *bax* encodes it and *bcl-2* represses it. Antioxidants are also effective repressors of it, as they prevent damage from free radicals, and the 2002 Nobel in Physiology was given for research into this process, in which normal cell

nuclei shrink to abnormal size and then fragment, causing their remains to be taken by surrounding cells. A contrast to cell necrosis, FTP, name this programmed cell death.

Answer: \_apoptosis\_

15. In his later career, he searched for hidden anagrams of proper names in Latin poetry, and his work with the Indo-European languages led to the discovery of laryngeal vowels. The creator of semiology, he assumed inextricability of form and content, as seen in his most famous work, which distinguished between the history of language and the system of analysis. FTP, name this Swiss linguist, whose work was collected posthumously in *Course in General Linguistics*.

Answer: Ferdinand de \_Saussure\_

16. The product of Rawson Thurber, a 27-year-old USC film school grad, the original goal of the project was to "score some chicks." Doug Liman eventually picked up the idea for his production company Hypnotic, before moving it on to its current location. As for Lester Speight, or "The Mighty Rasta", you might see him wailing on a guy who wins at Solitaire or tackling someone for not putting a cover on their TPS report. FTP, name this Reebok spokesperson, the ultimate office linebacker.

Answer: Terry \_Tate\_, OFFICE LINEBACKER

17. Born to Manoah of the Danites, his mother drank no wine or any other fermented drink while he was in the womb. After he grew up, he went to Timnah, where he married a woman, and, after a series of unfortunate events, she was given to his friend. Enraged, he burned the farmland of his in-laws, and after they killed his wife in anger, he slew 1000 Philistines with a jawbone. FTP, name this badass strongman, whose love for Delilah came to be his undoing.

Answer: \_Samson\_

18. Beginning with the imprisonment of Stafford and Laud, it declared ship money and distrains of knighthood illegal. In February 1641 it passed the Triennial Act, forcing the king to mandate its meeting every three years, passed the Grand Remonstrance, and abolished prerogative courts of the High Commission and Star Chamber, just prior to the virtual elimination of it known as Pride's Purge. FTP, name this governing body from 1640-1653, replaced by the Rump Parliament.

Answer: \_Long\_ Parliament

19. Largely unreactive toward nucleophilic substitution, they can be activated through protonation involving HI and HBr. Those in which the central atom is incorporated into a three-membered ring are known as epoxides, and the "crown" variety consists of one bound to a metal ion or an organic compound. Frequently used as solvents, they are usually characterized as symmetrical or asymmetrical. FTP, name these organic compounds with an oxygen atom bonded to two alkyl substituents.

Answer: \_ether\_s

20. It argues that the first principle of human behavior was egoism, and just as physical objects pursue their own direction, so do humans pursue their own self-interest. Thus, to eliminate the "war of all a "war of all agl", this work claims that it is necessary for men to agree upon and accept a common and absolute power, which would provide human life from becoming "nasty, brutish, and short." FTP, name this defense of secular monarchy by Thomas Hobbes.

Answer: \_Leviathan\_ [or the Matter, Form, and Power of a Commonwealth, Ecclesiastical and Civil]

21. Mount Erebus, Mount McClintock, and Mount Kirkpatrick all border it, and it covers up to fifty degrees longitude. The Edward VIII peninsula juts out into it, and Rockefeller Plateau lies to the west of this feature, which completely surrounds Roosevelt Island. Located just south of the Queen Maud Mountains,

FTP, name this ice shelf, which also borders its own namesake sea and is named for its American discoverer.

Answer: Ross\_ Ice Shelf

22. His unfinished novel *Recovery* was published one year after he committed suicide by jumping into the Mississippi River. His volume of poetry *The Dispossessed* belied his later technique of elliptical and convoluted verse, exemplified in *His Toy*, *His Dream*, *His Rest*, a major part of his most famous work, which consists of seventy-seven poems centering on Mr. Henry. FTP, name this Confessional poet and author of *Dream Songs*.

Answer: John\_Berryman\_

23. It contains a crucial section involving a kazoo, along with a cow mooing and a person gargling. First released in 1998, it begins by asking "What is this song all about? Can't figure any lyrics out," and eventually claims that raising cattle is far inferior to being a garage band from Seattle which doesn't really sound like Madonna. Replacing "A denial" with several nonsense words like "Adinaya" finally completes, FTP, what Weird Al Yankovic parody of a hit Nirvana single?

Answer: "Smells Like Nirvana"

24. Consisting of seventeen articles, its specific authorship is unknown. Its first article claims that "civil distinctions can be founded only on public utility", while the fifth claims that "the law ought to prohibit only actions hurtful to society." Heavily influenced by Locke's *Second Treatise on Civil Government*, it advocated "liberty, equality, and fraternity." FTP, name this influential document, ratified and passed by the constituent National Assembly on August 27, 1789.

Answer: Declaration of the Rights of Man\_ and of Citizens or \_Déclaration des droits de l'homme\_ et du citoyen

25. His first significant work, *The Song of Complaint*, failed to gain any recognition, and so he worked as a conductor, later becoming director of the Vienna Opera. His first symphony in D Major represents his emotional youth, and his marriage to Alma Schindler helped stabilize his life. His more important works came after studies of Wagner, including the *Kindertotenlieder* and *Symphony No. 5*, or the "Giant." FTP, name this Austrian composer of *Symphony of a Thousand*.

Answer: Gustav\_Mahler\_

26. Very useful in determining the frequency response of a signal, one method for obtaining it for any element in a circuit is phasor analysis. In an AC circuit, its imaginary component is the reciprocal of susceptance and results from the reactance of both inductors and capacitors, while its real component depends solely on the value of the resistance. Generally denoted with a capital Z, FTP, name this quantity measured in ohms.

Answer: impedance\_

27. The story begins on the banks of the Malini river, where she is abandoned by her mother Menaka. Raised by the hermit Kanva, in the forest one day she happens upon a king, who offers to marry her and ~~Dushyanta, but with the king who she produces for her in the forest she goes to the king and presents to him to see Ki~~

FTP, name this heroine of a work of the Sanskrit dramatist Kalidasa.

Answer: \_Shakuntala\_ [and the Ring of Recollection]

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Boni

1. Name these mathematical structures that are not sequels to Free Willy, for 10 points each.

A. These unique varieties of simple mathematical structures are strings of elements taken from a "base set" and combined by concatenation; they satisfy no nontrivial relations.

Answer: free groups

B. Any finitely-generated Abelian group can be written as the direct product of cyclic subgroups; this number is the power to which the set of integers  $\mathbb{Z}$  is raised in this decomposition.

Answer: free rank or Betti number

C. These simple, undirected, connected, acyclic graphs often used as data structures have the additional property that no node is treated as a root.

Answer: free tree

2. Name these ancient battles fought by the Macedonians, FTPE.

A. Philip II defeated an alliance of Greek city-states to finally subdue all of mainland Greece in this 338 BCE land battle.

Answer: Chaeronea

B. Alexander the Great's first foray into Persia resulted in this 334 BCE battle near the Dardanelles, in which Alexander scored his first crushing victory.

Answer: Granicus

C. This 331 BCE battle, also known as Arbela, was Alexander's final defeat of Darius III and secured nearly the entire Persian empire.

Answer: Gaugamela

3. Name these operas, FTPE.

A. Its creator's final opera, in it the title character leaves his wife Kondwiramur in search of the Holy Grail, where he encounters its guardian Amfortas.

Answer: Parsifal or Percival

B. This Hindemith opera focuses on the creator of the Isenheim Altarpiece.

Answer: Mathis der Maler

C. The plot of this Verdi opera is based on that of Shakespeare's *The Merry Wives of Windsor*.

Answer: Falstaff

4. Name these curves important to economic development, FTPE.

A. Developed by a namesake New Zealander, this curve based on data from Britain in the nineteenth century illustrated a fictional relationship between unemployment and inflation.

Answer: Phillips curve

B. Supposedly drawn on the bank of a napkin, this parabolic graph of tax rate vs. tax revenue became a cornerstone of supply-side economics under Reagan.

Answer: the Matt Laffer curve

C. Derived by plotting the relationship between the price level and equilibrium GDP, factors affecting it include the real balances effect and the interest rate effect.

Answer: aggregate demand (prompt on "demand")

5. Name these bodies of water in Southeast Asia, FTPE.

A. This sea lies east of Borneo, south of the Philippines, and north of its namesake set of islands.

Answer: Celebes Sea

B. This strait separates Malaysia from the island of Sumatra.

Answer: Strait of Malacca

~~On South Sep 2003~~ C. This gulf is surrounded by the Cape York Peninsula on one side and Arnhem Land on the other.

Answer: Gulf of Carpentaria

6. Answer these questions about the creation of the world in Norse myth, FTPE.

A. This primeval giant's parts were said to have created the world when Odin and his brothers ripped him to shreds.

Answer: Ymir

B. Ymir was fed by the four milky streams from this cow, which loved licking frost.

Answer: Audhumla

C. For a final ten, all or nothing, name both of Odin's brothers that helped him rip Ymir apart.

Answer: Vili and Ve

7. Name these groups that have done covers of the original Legend of Zelda theme, FTPE.

A. This group first performed the Legend of Zelda theme in the early 1990s as an opener for their slightly bigger hit "Closer."

Answer: Nine-Inch Nails

B. "Well, Link, fill up your hearts, so you can shoot your sword with power" is a line from this group's version, which was \*supposed\* to be a hidden track on their recent release *Steal this Album*.

Answer: System of a Down

C. Although Sudheer prefers this group's version of the Super Mario Brothers theme, he finds their rendition of John Williams' work quite excellent.

Answer: London Symphony Orchestra

8. He studied architecture in Paris and then moved to Chicago, pioneering the use of steel frames for high buildings. FTPE:

A. Name this creator of the Carson Scott and Company Store and major influence on Frank Lloyd Wright.

Answer: Louis Henry Sullivan

B. Now, name Sullivan's most famous creation, a St. Louis building featuring a large cornice under which runs an ornamental band of red terra-cotta.

Answer: Wainwright Building

C. Last, give Sullivan's three-word alliterative dictum, advocating utility over aesthetic merit.

Answer: "form follows function"

9. Name these Iraqi leaders in the spotlight from their playing card and a brief description, FTSNOP.

A. (5) The ace of spades, he ruled Iraq for a little while...and then George W. Bush decided that he needed to go.

Answer: S addam Hussein

B. (10) The king of spades, he received his nickname for his role in the 1988 attacks on the Iraqi Kurds. He is now believed to be dead

Answer: "Chemical" Ali Hassan al-Majid

C. (15) The ace of hearts, this man was in charge of the National Olympic Committee in Iraq.

Answer: U day Hussein

10. Name these American labor laws of the twentieth century, FTPE.

A. This 1935 act created the National Labor Relations Board to replace a section of the NIRA. It also reaffirmed labor's right to unionize.

Answer: Wagner Act (prompt on "National Labor Relations" Act)

B. Providing for a minimum wage of 25 cents an hour which would gradually increase, this 1938 law reduced the work week to 40 hours.

Answer: Fair Labor Standards Act

C. Named for two senators, this piece of 1947 legislation outlawed the closed-shop contract and ended the practice of employers collecting dues for unions.

Answer: Taft-Hartley Act

11. Name the author from works, 30-20-10.

A. *An Outcast of the Islands*; *Typhoon*; *Almayer's Folly*

B. *The Secret Sharer*; *Nostromo*

*Heart of Darkness*; *The Nigger of Nigger of*

Answer: Joseph Conrad or Teodor Josef Konrad Korzeniowski

12. Identify the following things related to gas chemistry, FTPE.

A. Denoted  $z$ , this quantity is equal to  $PV$  divided by  $nRT$ .

Answer: compressibility

B. This is the passage of a gas through a tiny orifice into an evacuated chamber. Graham's law tells us that its rate is proportional to the ratio of molar masses.

Answer: effusion

C. This is the term for any mathematical statement that describes the pressure, volume, temperature, and number of moles of a gas.

Answer: equation of state

13. Name these anthropologists from works, FTPE.

A. *Race and Democratic Society*, *The Mind of Primitive Man*

Answer: Franz Boas

B. *Structural Anthropology*, *The Savage Mind*, *The Raw and the Cooked*

Answer: Claude Lévi-Strauss

C. *Forest of Symbols*, written about the Ndembu tribe in Africa

Answer: Victor Turner

14. Name these bodies of water in Southeast Asia, FTPE.

A. This sea lies east of Borneo, south of the Philippines, and north of its namesake set of islands.

Answer: Celebes Sea

B. This strait separates Malaysia from the island of Sumatra.

Answer: Strait of Malacca

C. Southwest of the Torres Strait, this gulf is surrounded by the Cape York Peninsula on one side and Arnhem Land on the other.

Answer: Gulf of Carpentaria

15. Identify the following about Shinto, FTPE.

A. The word 'Shinto' roughly translates to this phrase in English.

Answer: "the way of the gods"

B. Followers of Shinto believe in spirits or deities known as this.

Answer: kami

C. The sun-goddess Amaterasu arose from the union of these two kami. Name them, FFPE.

Answer: Izanami and Izanagi

16. Name these characters from The Truman Show, FTPE.

A. Laura Linney plays this cheerleader and wife of Truman who draws his attention away from Sylvia, who has supposedly moved to Fiji.

Answer: Meryl

B. Truman's father, he was supposedly killed at sea, causing Truman to have a terrible fear of the water. He is later reintroduced to the show.

Answer: Kirk

C. The director of the Truman show is this earpiece-wearing balding man played by Ed Harris.

Answer: Cristo

17. Name these artists from works on a 15-5 basis.

A. (15) *Cornfield with Crows*; *The Siesta, after Millet*; *Sunflowers*

(5) *The Night Café*; *Starry Night*

Answer: Vincent van Gogh

B. (15) *Pesaro Altarpiece*; *Bacchanalia at Andros*

(5) *Sacred and Profane Love*; *Venus of Urbino*

Answer: Titian or Tiziano Vecellio

18. The first son of Charlemagne, he was renowned throughout Europe for his religious nature. FTPE:

A. Name this king, who died in 840.

Answer: Louis I\_ or Louis the Pious\_

B. In 843, the three sons of Louis the Pious divided the lands of the Frankish kings according to a peace agreement signed in this city.

Answer: Verdun\_

C. This oldest son of Louis the Pious received lands on the west side of the Rhine Valley, along with Italy and a region he named for himself.

Answer: Lothair\_ [the region was 'Lotharingia']

19. Name these Keats poems from the first few lines of each, FTPE.

A. "Season of mists and mellow fruitfulness / close bosom-friend of the maturing sun"

Answer: "To Autumn"

B. "Thou still unravished bride of quietness, / Thou foster child of silence and slow time"

Answer: "Ode on a Grecian Urn"

C. "Much have I traveled in the realms of gold / And many goodly states and kingdoms seen"

Answer: "On First Looking into Chapman's Homer"

20. Show some fraud knowledge of these physical effects, FTPE.

A. An electric current will flow in a closed circuit made up of two dissimilar metals if the junctions of the metals are maintained at two different temperatures.

Answer: Seebeck\_ effect

B. This is the reflection of light by very small particles in suspension in a transparent medium, often seen from dust when sunlight comes in through a window.

Answer: Tyndall\_ effect

C. Similar to the Zeeman effect, an externally applied electric field results in the asymmetric splitting of atomic spectral lines.

Answer: Stark\_ effect

21. Given a U.S. state, name both its newly elected governor and his/her runner-up, FFPE.

A. Michigan

Answer: Jennifer Granholm\_ and Dick Posthumus\_

B. Illinois

Answer: Rod Blagojevich\_ and J im\_ Ryan\_

C. New York

Answer: George Pataki\_ and Carl McCall\_

22. Name these German philosophers from works, FTPE.

A. *On the Way to Language; Being and Time*

Answer: Martin Heidegger\_

B. *Foundation of the Complete Theory of Knowledge; Critique of All Revelation*

Answer: Johann Gottlieb Fichte\_

C. *The Essence of Religion; The Essence of Christianity*

Answer: Ludwig Feuerbach\_

23. Name these sculptures of Gianlorenzo Bernini, FTPE.

A. Unlike earlier versions of this same piece, Bernini's 1623 version shows this Biblical figure about to launch a rock from his slingshot.

Answer: David\_

B. The centerpiece for the Cornaro chapel, it shows the vision of the title character most vividly through the gold spikes descending from above.

Answer: The Ecstasy of Saint Theresa\_

C. Bernini's most famous royal portrait is of this king, who sat for thirteen hours during a period of forty days.

Answer: Louis XIV\_

24. Name the composer from works, 30-20-10.

- A. *Ode to Death; St. Paul's Suite; At the Boar's Head*
- B. *Savitri; Egdon Heath; The Perfect Fool*
- C. *The Planets*

Answer: Gustav Holst

25. Name these amino acids, FTPE.

- A. This simplest amino acid simply has a hydrogen atom as its aliphatic side chain.

Answer: glycine

alanine.

Answer: cysteine

- C. This heterocyclic amino acid is the only one with a secondary amino group.

Answer: proline

26. Name these stories from Joyce's *Dubliners*, FTPE.

- A. Maria, a laundry manager, is blindfolded and gropes for a ring, but ultimately only gets the title object, all that awaits her "tiny little body."

Answer: "Clay"

- B. The last story in *Dubliners*; Gabriel Conroy's visit to his aunts' house ends with his discovery that his wife Gretta's greatest love is not him, but another man from Galway.

Answer: "The Dead"

- C. Set on the anniversary of Parnell's death, it tells of the political arguments between Mr. Hynes, a nationalist, and Mr. Henchy, a pragmatist, in the title location.

Answer: "Ivy Day in the Committee Room"

27. Name these one-time characters from *The Simpsons*, FTPE.

- A. He sells the monorail to the city of Springfield and attempts to flee to Tahiti.

Answer: Lyle Lanley

- B. She is the owner and proprietor of the Maison Derriere, a gentleman's club in Springfield.

Answer: Belle (if they can provide a last name, I'm impressed)

- C. Homer accidentally aids and abets this wanted criminal after he returns from a date with Marge to find her tied up in the living room.

Answer: the Babysitter Bandit (too lazy to look up her real name)

28. Answer these questions about the U.S. presidential election of 1860, FTSNOP.

- A. (5) First, who won the election?

Answer: Abraham Lincoln

- B. (5/10) Those politicians wishing to preserve the state of the nation created which new party ticket, and ran which politician as a presidential candidate?

Answer: Constitutional Union, John Bell

- C. (5/5) Last, the Democrats split into Northern and Southern factions, each supporting a different candidate. Name both, FFPE.

Answer: Stephen A. Douglas and John C. Breckinridge

29. Name these calculus theorems, FTPE.

- A. The double integral of a vector field  $F$  with respect to a boundary  $S$  containing a simple solid region  $E$  is equal to the triple integral of the divergence of  $F$  with respect to volume.

Answer: Divergence Theorem or Gauss' Theorem or Ostrogradsky's Theorem

- B. If a function  $g(x)$  lies between  $f(x)$  and  $h(x)$  near a certain value  $a$  and both latter functions reach the same limit at  $a$ , then  $g(x)$  is forced to have the same limit.

Answer: Squeeze or Sandwich or Pinching Theorem

- C. If a function  $f$  is bounded on a region  $R$ , then the order of integration for any number of iterated integrals over  $f$  does not matter.

Answer: Fubini's Theorem