

1991 Florida High School Academic Tournament

Introduce yourself.

Welcome participants, give round number and the significance of this particular competition. (Division 3: The two teams with the highest scores will advance to the semifinals today at 2:30 p.m. Division 2: The two teams with the highest score will advance to the semifinals on Monday at 8:00 a.m.)

Have judges, scorekeepers and student helpers introduce themselves. (Judges should give their name and the areas in which they will be judging only.)

Have the team coaches come forward to introduce himself/herself and team members.

Conduct a button check.

Begin 5-point question round.

MATH 1. Give the exact length in inches of the diagonal of a square whose side measures ten inches.

Answer: $10\sqrt{2}$

ENG 2. Identify the literary school of poetry to which John Donne and his followers belong.

Answer: Metaphysical Poets
(accept: Metaphysical)

ECON 3. Which one of the following four administers the monetary policy of the United States?

- A. the Treasury Department
 - B. the President
 - *C. the Federal Reserve System
 - D. the Congress
- = Fiscal policy

(Source: Economics - Institutions and Analysis, Amsco 1985)

SCI 4. Supply the missing word in the following statement.

In reactions, elements of the halogen family _____ an electron.

Answer: gain

(Source: Chemistry: A Modern Course, Merrill, p. 200)

ENG 5. Match each of the four idioms to its translation.

<u>Idioms</u>		<u>Translations</u>
1. at sixes and sevens	A.	to suffer a humiliating experience
2. beyond the pale	B.	in a state of confusion or disorder
3. cross the Rubicon	C.	to make an irrevocable decision
4. eat crow	D.	totally unacceptable

Answer: 1-B, 2-D, 3-C, 4-A

MATH 6. What number must be added to both the numerator and denominator of the fraction $\frac{3}{5}$ to make a fraction equal to $\frac{3}{4}$?

Answer: 3

SS 7. Name the two Presidents whose administrations are associated with each of the following scandals.

1. Teapot Dome
2. Crédit Mobilier

Answer: 1. (Warren G.) Harding, 2. (Ulysses S.) Grant

(Source: Triumph of the American Nation)

MUS 8. Fill in the blank. José Carreras, Plácido Domingo and Luciano Pavarotti are opera singers who sing in the vocal range known as _____.

Answer: tenor

SCI 9. Identify the approximate geometric shape formed by a diagram showing the biomass of organisms at various trophic levels in an ecosystem.

Answer: triangle (accept: pyramid)

ENG 10. Which one of the following four persons wrote a book which portrayed the intense loneliness of farm life?

- A. James Fenimore Cooper
- B. Washington Irving
- *C. Hamlin Garland
- D. Edgar Allan Poe

MATH 11. The angles of a triangle are in the ratio four to seven to nine. Find the degree measure of the largest angle.

Answer: 81

For the next question you will view an art handout (art handout 4-1). There will be one, two-part question concerning this handout.

- ART 12. This is a two-part question. Name the artist of this painting and identify the style in which this image was created.

Answer: (Claude) Monet, Impressionism

- SCI 13. When the new moon is compared to the first quarter phase, is the amount of sunlight covering the moon more, the same, or less?

Answer: the same

- SS 14. Fill in the blank with the missing word. According to Freud, basic sexual and aggressive urges reside in the _____.

Answer: id

(Source: Understanding Psychology)

- MUS 15. In Puccini's opera La Bohème, with which one of the two women is Rodolfo in love, Mimi or Musetta?

Answer: Mimi

- ENG 16. Give the title and author of a novel written as a personal response to the author's World War II experiences in Dresden, Germany.

Answer: Slaughterhouse Five; Kurt Vonnegut, Jr. (accept: Vonnegut)

(Source: Benét's Reader's Encyclopedia, p. 1037)

- SCI 17. Which one of the following four atoms would have the greatest velocity if all the atoms had the same kinetic energy?

- A. bromine
- *B. hydrogen
- C. chlorine
- D. ammonia

- MATH 18. At a recent SAT test, the booklets used started with number 17909 and ended with number 18021. How many students took the test?

Answer: 113

- HUM 19. Identify the Greek philosopher who stated that "Man is the measure of all things."

Answer: Protagoras

- SS 20. Which one of the following four resulted from the twenty-first amendment?

- A. increase in gang wars
- B. decline in liquor-tax revenues
- C. change of inauguration day
- *D. dependence upon state legislation for prohibition

End of 5-point round.

Begin 10-point team question.

Read: For this team question you will be given Handout 4-2.

Do not distribute the handouts until you are instructed to do so. This team question is worth 10 points. Each question is worth one point.

You will be given 2 minutes. Please identify one handout as your team answer sheet in the upper left-hand corner.

Begin

Time 2 minutes.

STOP!

Identify one handout as your team answer sheet and hold it in the air. The judges will correct your work.

Read answers: (one point each)

- | | |
|------|-------|
| 1. H | 6. I |
| 2. J | 7. F |
| 3. D | 8. E |
| 4. B | 9. G |
| 5. C | 10. A |

Announce scores from team question.

Two-minute break. (All coaches should report to scorekeepers whether substitutions are made or not.)

Announce scores after the round.

Begin 10-point question round.

ART 21. Name the painting technique which employs finely ground pigments suspended in water and applied to a damp lime-plaster surface.

Answer: fresco

(Source: Artforms, Preble, p. 138, Harper & Row)

SS 22. Which one or ones of the following four are considered Middle Atlantic states?

- *A. New York
- *B. New Jersey
- C. Virginia
- D. Connecticut

(Source: The American Heritage Dictionary, p. 830)

Handout 4-2

Team # _____

Match each of the following "fair ladies" to the appropriate gentleman.

	<u>Fair Ladies</u>	<u>Gentlemen</u>
_____	1. Guinevere	A. Tom Buchanan
_____	2. Beatrice	B. Candide
_____	3. Dulcinea	C. Abelard
_____	4. Cunegonde	D. Don Quixote
_____	5. Héloïse	E. Higgins
_____	6. Cleopatra	F. Romeo
_____	7. Juliet	G. Paris
_____	8. Liza	H. King Arthur
_____	9. Helen	I. Antony
_____	10. Daisy	J. Dante

SCI 23. Who am I?

- I was born in 1743 in France.
- I was an aristocrat and member of the Royal Taxation Commission.
- I was beheaded during the French Revolution.
- I am known as the founder of modern chemistry.

Answer: (Antoine Laurent) Lavoisier

(Source: Chemistry, By Addison-Wesley)

ENG 24. Give the full name of the author who used the pen name of O. Henry.

Answer: William Sydney Porter

MATH 25. The difference of the squares of two consecutive odd numbers is 48. Find the smaller number.

Answer: 11

$$\sqrt{121} \sqrt{169}$$

MUS 26. Match each of the three cities to the opera house located there.

	<u>Cities</u>	<u>Opera Houses</u>
1.	Milan	A. Covent Garden
2.	London	B. La Scala
3.	New York	C. The Metropolitan

Answer: 1-B, 2-A, 3-C

SS 27. Complete the following analogy. George Calvert is to Maryland as _____ is to Rhode Island.

Answer: Roger Williams

ENG 28. Which one of the following four is not associated with the legend of Robin Hood?

- A. Maid Marian
- *B. Mordred
- C. Little John
- D. Friar Tuck

SS 29. Name the monarch associated with the Russian Revolution of 1917.

Answer: (Czar) Nicholas II

(Source: The Human Experience)

ENG 30. Match each of the four mythical animals to its description.

<u>Mythical Animals</u>	<u>Descriptions</u>
1. centaur	A. part lion, bird, woman
2. satyr	B. part horse, part man
3. sphinx	C. part lion, goat, serpent
4. chimera	D. part goat, part man

Answer: 1-B; 2-D; 3-A; 4-C

For the next question you will be given handout 4-3. Do not distribute these until you are instructed to do so. (pause) Distribute these face down. You are to choose to answer the question in Spanish, French or German.

FL 31. Which one or ones of the four words do not have anything in common with weather? Turn them over and begin.

Answer: A

SCI 32. Which one of the following four maladies is not the result of a chromosomal abnormality?

- A. Down's syndrome
- B. Klinefelter syndrome
- C. Turner's syndrome
- *D. Cushing's syndrome

trisomy 21 (extra 21)

(Source: HBJ Biology, pp. 205-207)

MATH 33. A forty-one foot wire stretches from the top of an electrical pole to the ground. It touches the ground nine feet from the base of the pole. Find the height in feet of the pole.

Answer: 40

ENG 34. Identify the war to which Tennyson's poem "The Charge of the Light Brigade" relates.

Answer: Crimean War

HUM 35. Name the Greek philosophy, popular with the Roman patrician class, which held that one should learn to be indifferent to all external influences.

Answer: stoicism

SCI 36. Which one of the following four reasons best explains why extensive adaptive radiations have usually followed in the wake of mass extinctions in past geological history?

- *A. Many adaptive zones are vacated.
- B. Conditions of the physical environment are always most favorable following a crisis.
- C. The survivors of a crisis have inferior adaptations.
- D. Preadaptation assures that survivors will fit their new environment.

Handout 4-3

Spanish

- A. mentir
- B. nevar
- C. congelar
- D. tronar

French

- A. menteur
- B. neiger
- C. geler
- D. tonnerre

German

- A. Rasen
- B. Wolken
- C. Schnee
- D. Donner

MATH 37. One number is four times another number. The sum of their reciprocals is one-fourth. Find the two numbers.

Answer: 5 and 20 (either order)

SS 38. Which one or ones of the following four resulted from the Crusades?

- *A. the increased flow of trade between Asia and Europe
- B. the increased power of the nobility in Western Europe
- *C. the decline of Constantinople as a major trade center
- D. increased control of church doctrine over political decisions

MATH 39. Rectangle A B C D encloses an area of thirty square feet. Where on side CD must point X be located so that triangle ABX has an area of fifteen square feet?

Answer: anywhere

SCI 40. Which two of the following four are always numerically equal?

- *A. gravitational mass
- B. gravitational force
- *C. inertial mass
- D. centrifugal force

(Source: Physics: Principles and Problems, p. 83)

End of 10-point round.

Begin 20-point team question.

Read: For this team question you will be given Handout 4-4.

Do not distribute the handouts until you are instructed to do so. This team question is worth 20 points. Each question is worth 2 points.

You will be given 3 minutes. Please identify one handout as your team answer sheet in the upper left-hand corner.

Begin.

Time 3 minutes.

STOP!

Identify one handout as your team answer sheet and hold it in the air. The judges will correct your work.

Read answers: (2 points each)

- | | |
|---------|------------|
| 1. Pigs | 6. Buffalo |
| 2. Bear | 7. Kitty |
| 3. Fox | 8. Horse |
| 4. Bull | 9. fish |
| 5. Hawk | 10. Cow |

Handout 4-4

Team # _____

Animal Farm

Complete the following phrases from American history by supplying the missing animal.

1. Bay of _____
2. _____ Flag Republic
3. The Swamp _____
4. Battle of _____ Run
5. War _____
6. "_____ Bill" Cody
7. _____ Hawk
8. Dark _____
9. Huey P. Long, "The King _____" (one word)
10. Battle of _____ pens (one word)

Announce scores from team question.

Two-minute break. (All coaches should report to scorekeepers whether substitutions are made or not.)

Announce scores after the round.

Begin 15-point question round.

- HUM 41. Name the Pre-Socratic Greek philosopher who was the first person of record to challenge the old accepted religious explanations for natural things and is considered the Father of Philosophy.

Answer: Thales

- ENG 42. Which one of the following four authors wrote The Fountainhead?

- A. Katherine Porter
- B. Zora Hurston
- *C. Ayn Rand
- D. Bobbie Ann Mason

- MS 43. One letter is chosen at random from the name of the capital city of South Dakota. In lowest terms, what is the probability the letter chosen will be an E?

Answer: $\frac{1}{3}$ (Pierre)

- MATH 44. How many different diagonals can be drawn in an octagon?

Answer: 20

- SCI 45. What color light will result if red light and green light are mixed?

Answer: yellow

(Source: Physics: Principles and Problems by Merrill, p. 293)

- SS 46. Place the following four events preceding the American Revolution in chronological order.

- A. Sugar Act
- B. Molasses Act
- C. Stamp Act
- D. Townshend Acts

Answer: B, A, C, D

(Source: A History of the United States, Boorstin)

(Note: A-1764, B-1733, C-1765, D-1767)

- ENG 47. Match each of the four poets to the title of the poem each wrote on love.

<u>Poets</u>	<u>Titles of Love Poems</u>
1. Anne Bradstreet	A. "How Do I Love Thee?"
2. Lord Byron	B. "When in Disgrace"
3. Elizabeth Barrett Browning	C. "She Walks in Beauty"
4. William Shakespeare	D. "To My Dear and Loving Husband"

Answer: 1-D, 2-C, 3-A, 4-B

- MATH 48. What is the value of the function y equals the cotangent of the quantity two times the arccosine of negative square root of two over two?

Answer: zero

- MS 49. Name three of the four words beginning with the letter G from the following descriptions.

1. a form of a verb that ends in -ing and operates as a noun in a sentence
2. a teacher or spiritual leader in Hinduism
3. the basic unit of measurement for mass in the metric system
4. an economics term meaning the aggregate

Answer: (any three) 1. gerund, 2. guru, 3. gram, 4. gross

- SCI 50. How many moles of molecular hydrogen are in one pound if there are 454 grams in a pound?

Answer: 227

For the next question you will be given handout 4-5. Do not distribute these until you are instructed to do so. (pause) Distribute these face down.

- FL 51. The question is printed on the handout. Turn them over and begin.

Answer:

Spanish

1. Lady and the Tramp
2. Meatballs II
3. Dirty Dancing
4. Gone with the Wind

German

1. Gone With the Wind
2. Dirty Dancing
3. Some Like It Hot
4. The Lady and the Tramp

French

1. The Right Stuff
2. Some Like it Hot
3. The Toy
4. To Be or Not to Be

Handout 4-5

French:

Donnez les equivalences anglaises pour les films suivants:

1. L'étoffe des héros
2. Certains l'aiment chaud
3. Le Jouet
4. Etre ou ne pas être

Spanish:

¿Cuál es el título en español que corresponde a la película en inglés?

1. La Dama y el Vagabundo
2. Albóndigas II
3. Baile Caliente
4. Lo que el viento se llevó

German:

Geben Sie die englischen Titel für die folgenden Filmen:

1. Vom Winde verweht
2. Schmutziges Tanzen
3. Manche mögen es heiss
4. Die Dame und der Lump

ENG 52. Which one of the following four Faulkner novels was partially "a tale told by an idiot"?

- A. As I Lay Dying
- *B. The Sound and the Fury
- C. Absalom, Absalom
- D. The Bear

MS 53. Match each of the four floating vessels to the appropriate form of propulsion. Forms may be used more than once.

<u>Floating Vessels</u>	<u>Forms of Propulsion</u>
1. canoe	A. paddles
2. dirigible	B. sails
3. kayak	C. motor
4. clipper	

Answer: 1-A, 2-C, 3-A, 4-B

SCI 54. Which one of the following four describes the major direction of movement of the Pacific side of the San Andreas Fault?

- A. south
- B. east
- *C. north
- D. west

MATH 55. Find the unit measure of the other base of a trapezoid if the measures of a base and median are 12 and 29 units respectively.

Answer: 46

SS 56. Match each of the four U.S. Supreme Court cases to the issue it addressed.

<u>Cases</u>	<u>Issues</u>
1. <u>United States v. Richard Nixon</u>	A. right to privacy
2. <u>Roe v. Wade</u>	B. right to counsel
3. <u>Gideon v. Wainwright</u>	C. unreasonable search and seizure
4. <u>Mapp v. Ohio</u>	D. executive privilege

Answer: 1-D, 2-A, 3-B, 4-C

MS 57. Compute the result of the following three-step problem:

Multiply a baker's dozen by the number of deadly sins. Add to that the product of the number of points on a star of David and the number of gables on a house by Nathaniel Hawthorne.

Answer: 133 (13x7=91; 91+6x7= 91+42)

HUM 58. Match each of the four artistic terms to its definition.

	<u>Terms</u>	<u>Definitions</u>
Korā	1. kaolin	A. a Greek statue of an ideal male youth from the Archaic period
	2. kore	B. a Greek statue of an ideal female youth from the Archaic period
	3. kitsch	C. low quality, mass-produced artifacts
	4. kouros	D. white clay

Answer: 1-D, 2-B, 3-C, 4-A

COMP 59. Arrange the following four developments in the history of computer science in chronological order according to their emergence.

- A. stored program concept
- B. punched card
- C. silicon chip
- D. integrated circuit

Answer: B, A, D, C

For the next question you will hear the tape recording of four musical selections (tape 4-6, no handout). There will be one question concerning this tape.

MUS 60. Which one of the four musical selections played was not composed by Andrew Lloyd Weber?

Answer: the third selection (note: Starlight Express, Evita, Les Misérables, Cats)

SS 61. Name the first Frankish king to convert to Roman Catholicism and to establish the first Christian kingdom in Gaul.

Answer: Clovis

ENG 62. Match each of the four works to what it highlights or the social condition it protests.

<u>Works</u>	<u>Highlights or Protests</u>
1. <u>The Crucible</u>	A. plight of the urban poor in the late 1800's
2. <u>In Cold Blood</u>	B. plight of the rural poor during the 30's
3. <u>Grapes of Wrath</u>	C. capital punishment
4. <u>Maggie, A Girl of the Streets</u>	D. McCarthyism

Answer: 1-D, 2-C, 3-B, 4-A

MATH 63. Find the ordered triple that satisfies the following system of equations: $x+2y-3z=5$, $2x-y-z=0$, and, $y-3z=0$

Answer: (2,3,1)

mez / chx / tery
~~mez / chx / tery~~

Set 4
(1991)

SCI 64. In which one of the following four body cavities would the mesenteries called the greater and lesser omentum be found?

- *A. abdominal
- B. cranial
- C. pelvic
- D. thoracic

(Source: Human Anatomy & Physiology, Marieb, pg. 758)

SS 65. Which one of the following four sociologists was the first to use the scientific method to research suicide?

- A. Ralph Linton
- *B. Emile Durkheim
- C. Horace Minor
- D. Auguste Comte

(Source: World Book Encyclopedia, "Sociology")

End of 15-point round.

Begin 30-point team question.

Read: For this team question you will be given Handouts 4-7, 4-7A, and 4-7B.

Do not distribute the handouts until you are instructed to do so. This team question is worth 30 points. The value of each question is printed on the handout.

You will be given 5 minutes. Please identify one handout as your team answer sheet in the upper left-hand corner.

Begin.

Time 5 minutes.

STOP!

Identify one handout as your team answer sheet and hold it in the air. The judges will correct your work.

Read answers: (one point for each city and three points for each letter.)

<u>Group One</u>	<u>Group Two</u>	<u>Group Three</u>	<u>Group Four</u>
1. Santa Fe	1. Houston	1. Cleveland	1. Minneapolis
2. Austin	2. Kansas City	2. Chicago	(accept:
3. Little Rock	3. New Orleans	3. Des Moines	Minneapolis-
4. Pensacola	4. Indianapolis	4. Chicago	St. Paul)
5. Charleston	5. Cross Creek	5. Montgomery	2. New Orleans
			3. St. Augustine

W

M

T

L

Handout 4-7

Team # _____

The Alphabetical Tourists

Use the clues provided by four groups of tourists to identify the cities visited. By connecting these cities with lines you will form a capital letter. Use the map on Handout 4-7B to help in your task. You will receive one point for each city correctly identified and three points for each letter correctly identified.

Group One:

1. Our trip began in a city located just east of the Continental Divide, near the Rio Grande River, whose name was used in a famous railroad company. _____
2. We traveled next to the capital city of Texas. _____
3. Our journey continued to the site of racial disturbances revolving around desegregation, the capital city of Arkansas. _____
4. From there we traveled to a major city in the Florida Panhandle which is the site of a naval base. _____
5. Our tour ended in a historic city in South Carolina which sustained major damage by Hurricane Hugo. _____

Letter Formed: _____

Group Two:

1. The tour by a literary group began in a city in Texas whose first three letters are the same as the first three letters of the race of horses encountered by Gulliver on his fourth voyage. _____
2. The group traveled north to a major Midwestern city whose name suggests that the major portion of the city should be located in a bordering state, but is not. _____
3. The literary group went next to the city which is located at the mouth of the river mentioned in books by Mark Twain. _____
4. The city visited next is the capital city of the state whose one-word name contains the state name, the first name of a character who went on his "Last Crusade" recently in the cinema. _____
5. The literary group's tour ended in a small city in northern Florida which provided the setting for most of the work of Marjorie Kinnan Rawlings. _____

Letter Formed: _____

Handout 4-7A

Team # _____

Group Three:

1. A group of social studies teachers began its journey in a city located on Lake Erie whose name is that of the twenty-second and twenty-fourth Presidents. _____
2. This group traveled to the city which was the site of the St. Valentine's Day Massacre in 1929. _____
3. The next day the group toured the Iowa state capital. _____
4. The group returned for a visit to the city which provided the setting for the Upton Sinclair novel, The Jungle, which centered on the meat packing industry. _____
5. The group's tour ended in the southern city in which Rosa Parks refused to give her seat to a white man on a bus. _____

Letter Formed: _____

Group Four:

1. A group of mathematics teachers began its tour in a city known for its winter carnival, the Metrodome, and the Twins. It is located along a line of latitude which has the measure of one-half that of a 90° angle. _____
2. The tour proceeded to a southern city located on a line of latitude with measure that is the result of bisecting one angle of an equilateral triangle. This city is known for its French tradition and was the site of Super Bowl XXIV. _____
3. The journey ended in the land of the Appalachee and Miccosukie in a city founded in MDLXV. This city is located just south of the same line of latitude as the city previously visited. _____

Letter Formed: _____

