

### Round 7 1st Section Toss-up Questions

# **Question #1: Social Studies – U.S. History**

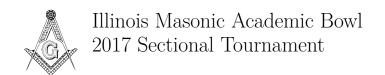
10 points

This President said that he would "settle the	James A(bram) Garfield
question whether the President is registering clerk	
of the Senate or the Executive of the United States"	
when he appointed William Robertson to run the	
New York Customs House, which led to the	
resignation from the Senate of Roscoe Conkling.	
This person is the only sitting House of	
Representatives member to be elected President.	
This Republican narrowly defeated Winfield Scott	
Hancock in the election of 1880. Name this man	
who had been in office for only six months when he	
was shot by Charles Guiteau [gee-toe].	

#### **Question #2: Science – Health**

10 points

This disease is indicated by a score above 6.5 on an	diabetes [accept more
A1C test. Pregnant women with this disease are at	specific answers]
risk of increased blood pressure through	
pre-eclampsia ["pre-uh-CLAMP-see-uh"]. People	
with this disease have increased osmotic	
[ahz-MAH-tik] pressure in their kidney tubules,	
causing increased urination. Alcoholism, starvation,	
and this disease cause ketoacidosis	
[KEE-toh-"acid"-OH-siss]. During pregnancy,	
women are supposed to get a blood test after	
drinking a syrupy solution to test for this disease.	
Type One of this disease is caused by the	
destruction of cells in the pancreas that produce	
insulin. Name this disease in which people have too	
much glucose in their blood.	



### Round 7 1st Section Toss-up Questions

# **Question #3: Literature – Grammar/Usage**

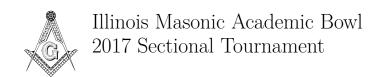
10 points

This alphabet is not a language, but is used by the	Cyrillic [accept azbuka]
Dungan language and several others. The Latin	
alphabet and this alphabet are used for the Aleut	
[uh-LOOT] language. The Zhuang [zhoo-aing]	
language incorporates modified portions of this	
script, as well as IPA. In Romania, this successor to	
Glagolitic [gla-goe-LI-tik] was replaced with the	
Latin alphabet. In both this alphabet and the	
Greek alphabet, the letter that looks like a 'P' is	
pronounced like an 'R'. This alphabet is named for	
a ninth-century monk. Name this alphabet used for	
most Slavic languages, including Russian.	

## **Question #4: Miscellaneous – Technology**

10 points

On the Commodore Amiga, Lemmings and Settlers	computer <b>mouse</b> or <b>mice</b>
allowed for two of these to be used simultaneously.	
Versatron created a foot-operated version of this	
device. Mario Paint for the Super NES required	
the extensive use of one of these devices. Green	
PS/2 ["P S two"] connectors were used for this	
device before USB became more popular.	
Trackballs can substitute for these devices, and	
laptops usually have trackpads to serve the role of	
this device. Name this computer peripheral used to	
move the cursor.	



### Round 7 1st Section Toss-up Questions

### **Question #5: Science – Chemistry**

10 points

Other than water, this is the simplest product of		
the Fischer-Tropsch process, though it usually is an		
unwanted product. Several classes and genuses in		
the phylum Euryarchaeota		
[YUR-ih-ARK-ee-OH-tuh] are named for their		

[YUR-ih-ARK-ee-OH-tuh] are named for their ability to produce this compound. In recent years, giant holes have been found in Siberia caused by permafrost melting, leading to explosions of this compound. This greenhouse gas is the simplest alkane and simplest hydrocarbon. Name this primary component of natural gas whose chemical formula is CH<sub>4</sub>.

methane [accept CH<sub>4</sub> before the end]

### **Question #6: Social Studies – Religion**

10 points

This person remained married to Michal
[mee-KAHL] even though they both married other
people, and she got mad when she saw him dancing
near the Ark of the Covenant. This man said "If
only I had died instead of you," when his general
Joab [johb] killed this man's rebellious son.
According to the Book of Matthew, there are 14
generations from Abraham to this person and 14
more from him until the exile to Babylon. This
Biblical leader was anointed by Samuel as the King
of Israel after God became angry with Saul. Name
this father of Solomon who is credited with writing
the Psalms.

David [may be pronounced with stress on the second syllable; accept Dawud]



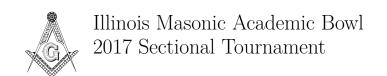
#### **Question #7: Fine Arts – Jazz**

10 points per part

This	s musician recorded the Billy Strayhorn songs	
"Sor	nething to Live For" and "Chelsea Bridge".	
1	Name this pianist and bandleader, whose real	(Edward Kennedy) "Duke"
	first name was Edward. He wrote the songs "It	Ellington
	Don't Mean a Thing (If It Ain't Got That	
	Swing)" and "In a Sentimental Mood".	
2	Strayhorn wrote this signature song for	"Take the A Train"
	Ellington about a ride into Harlem.	
3	Ellington collaborated with this singer on the	(Francis Albert) "Frank"
	album Francis A. & Edward K. In the movie	<u>Sinatra</u>
	Reveille [REH-vuh-lee] with Beverly, Ellington	
	played "Take the A Train", and this singer	
	performed "Night and Day".	

#### **Question #8: Fine Arts – Jazz**

This	s musician won a Grammy for his performance	
of t	he song "Hello, Dolly!".	
1	Identify this singer and trumpeter who was	Louis <b>Armstrong</b>
	nicknamed "Satchmo". His popularity increased	
	when he recorded "What a Wonderful World"	
	and "Cabaret".	
2	Armstrong often performed with this singer,	Ella (Jane) <b>Fitzgerald</b>
	who is famous for her recording of "A-Tisket,	
	A-Tasket". They collaborated on an album with	
	songs from <i>Porgy and Bess</i> .	
3	The album Ella and Louis includes this song	"(No, no,) They can't
	that begins, "The way you wear your hat, /	take that away from
	The way you sip your tea, / The memory of all	<u>me</u> "
	that".	



# **Question #9: Science – Chemistry**

10 points per part

Salt	s are characterized by having this type of	
bon	d.	
1	Name this type of bond between two atoms	ionic bond(s)
	that have a large difference in electronegativity	
	["elect"-roh-"negativity"].	
2	Salts can also be defined as a substance formed	neutralization reaction
	by reacting an acid and a base, which is known	
	as this type of reaction.	
3	The constant named for this person is used to	Erwin <b>Madelung</b>
	calculate the electrostatic potential in an ionic	[AIR-vin MAH-deh-loonk]
	crystal. A rule named for this German scientist	
	is used as part of the Aufbau ["off-bow"]	
	principle to determine which electron orbitals	
	are filled first.	

# **Question #10: Science – Chemistry**

This	s person is credited with calculating the charge	
on an electron, although much of the experiment		
was	done by his student Harvey Fletcher.	
1	Identify this namesake of the oil-drop	Robert (Andrews)
	experiment, in which an electric field was used	Millikan [do not accept or
	to balance the Earth's gravitational field.	prompt on "Mulliken"]
2	What is the charge on an electron? Give an	$-1.6 \times 10^{-19} \; { m C} \; { m [The}$
	answer in coulombs, using scientific notation to	negative sign in front is
	two significant digits.	optional.
		-
3	Much of the error in Millikan's measurement of	(dynamic or absolute)
	elementary electric charge is due to an error at	$\underline{ ext{viscosity}}$
	the time in measuring this property of air. This	
	quantity is a measure of resistance to flow.	



# **Question #11: Social Studies – World History**

10 points per part

Wil	helm [VIL-helm] I was the king of this state	
befo	ore he became the emperor of Germany.	
1	Name this state that unified Germany in 1871	(Kingdom of ) <b>Prussia</b> [or
	while it was defeating France at war.	Preußen]
2	This Prussian leader became the first chancellor	Otto von Bismarck
	of Germany.	
3	Much of Prussia's success during the	Helmuth von Moltke
	Franco-Prussian War was credited to this field	[HEL-moot vawn
	marshal, who was chief of staff of the Prussian	MOHLT-kuh] the Elder
	Army. This person's nephew lost the First	
	Battle of the Marne at the beginning of World	
	War One.	

## **Question #12: Social Studies – World History**

This	s prime minister stepped down for five days in	
1952	2 in a move that ended up consolidating his	
pow	ver.	
1	Name this prime minister who nationalized his	Mohammad Mosaddegh
	country's oil industry, leading to a 1953 coup	[MOH-suh-day]
	sponsored by the CIA.	
2	Mosaddegh led this country, where a 1979	(Islamic Republic of) <u>Iran</u>
	revolution gave power to Ayatollah Khomeini,	[or (Jomhuri-ye Eslami-ye)
	and involved the taking of American hostages	<u>Iran</u> ]
	who were held for over a year.	-
3	Mossadegh's first resignation and the Iranian	Shah [accept
	Revolution both took power away from	Shahanshah]
	Mohammad Reza Pahlavi. Pahlavi held this	
	title, which means "king".	



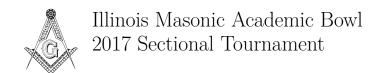
# **Question #13: Mathematics – Algebra**

10 points per part

If tv	vo quantities are in inverse variation with each	
othe	er, one decreases when the other increases.	
1	Give the common name for the type of proportional variation in which the dependent variable increases when the independent variable increases. It is often represented by the equation $y = kx$ , where $k$ is some positive number.	direct variation or direct proportion [prompt on linear variation]
2	Two variables vary directly, and when the input is 2 the output is 12. Find the constant of variation.	$k = \underline{6}$
3	If y varies directly with $x^2$ ["x squared"], and $y = 10$ when $x = 5$ , then find the value of y when $x = 20$ .	y = 160

# **Question #14: Mathematics – Algebra**

These numbers have a real and an imaginary		
component.		
1	Name these numbers that can be written in the	<b>complex</b> numbers
	form $a + bi$ , where $i$ is a square root of $-1$ .	
2	Multiply the number $2 + 3i$ times the number	3+11i
	3+i, and give your answer in $a+bi$ form.	
3	Divide the number $4 - i$ by $i$ , and give your	-1 - 4i or $-1 + -4i$
	answer in the form $a + bi$ .	



### Round 7 3rd Section Toss-up Questions

#### **Question #15: Literature – U.S. Literature**

10 points

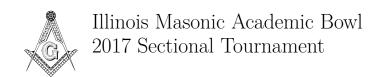
In one play by this writer, the title character tells	Eugene (Gladstone)
Matt that she used to work in a brothel after he	O'Neill
proposes to her. This playwright wrote about Larry	
Slade, who called death a "long sleep". In the same	
play, this author wrote about Don committing	
suicide and Hickey confessing to murdering his own	
wife. This person also wrote two plays about a	
family that includes the morphine addict Mary and	
a son named Edmund who suffers from tuberculosis,	
in which the father, the washed-up actor James	
Tyrone, is too cheap to get a doctor. Name this	
playwright of Anna Christie, The Iceman Cometh,	
and Long Day's Journey into Night.	

# **Question #16: Science – Physics**

10 points

In the presence of a loop of W bosons [BOH-zahnz],	<u>Higgs</u> bose
this particle decays into two photons. This particle	particle]
can also decay into either two Z bosons or into the	
two types of W boson. This particle is the only	
fundamental scalar particle, which means that its	
spin is zero. The mass of this particle is 126	
giga-electron volts. A major basis for theories	
predicting the existence of this particle is	
spontaneous symmetry breaking, which takes place	
during electroweak interactions to confer some	
particles with mass. Name this particle whose	
existence was confirmed in 2013 after very	
expensive research at CERN [surn].	

Higgs boson [or Higgs particle]



# Round 7 3rd Section Toss-up Questions

#### **Question #17: Fine Arts – Art History**

10 points

Pietro Perugino's [peh-roo-GEE-noe'z] painting of this event hangs in what used to be the Convent of Fuligno [foo-LEEN-yoh], and shows the central figure with his hand on the shoulder of somebody whose head is down. A painting made in the 1590s showing this event, depicting several extra characters and showing the main subject at an angle, was made by Jacopo Tintoretto. Another portrayal of this event, hanging in the Convent of Santa Maria delle Grazie [DEL-lay GRAH-zyay] in Milan, shows the central figure's open hands above the table. Name this event whose depictions — though not the one by Leonardo da Vinci — sometimes show Judas on the opposite side of the table.

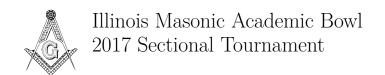
The <u>Last Supper</u> [or Il <u>Cenacolo</u> or L'<u>Ultima</u> <u>Cena</u>]

### **Question #18: Mathematics – Math Concepts**

10 points

The standard type of this quantity equals the standard deviation divided by the square root of the number of measurements. In the context of Taylor series, this value is sometimes called the remainder, and can be bounded using formulas attributed to Lagrange [luh-grahnj] and Cauchy [KOW-chee]. A statistical test is unbiased if it has an equal likelihood of producing type I or type II of these entities, which are false positive and false negative. Name this phenomenon in which two values differ, possibly due to approximation, imprecise measurement, or mistake.

(statistical, measurement, or approximation) **errors** 



# Round 7 3rd Section Toss-up Questions

### **Question #19: Literature – Mythology**

10 points

During the New Moon, this god was known as Mekhenty-er-irty [muh-KEN-tee ur "EAR-tee"], or "He who has no eyes". This god epitomized the newborn sun each morning in the form of a child with a finger to his lips. The four sons of this god represented the four cardinal directions and guarded the canopic [kuh-NAH-pik] jars. The serekh [SAIR-ek] name used for early Egyptian pharaohs was closely associated with this god because of depictions on heraldic crests. This god used gypsum [JIP-sum] to disguise his wooden boat during a race on the Nile against his uncle, who had killed this god's father, Osiris ["oh-SIGH"-rus]. Name this falcon-headed rival and nephew of Seth.

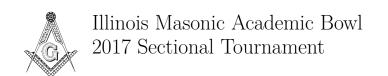
Horus [accept Hor orHar or Her or Heru;prompt on Harpocrates]

#### Question #20: Social Studies - U.S. Government

10 points

In 1847, the Supreme Court ruled that both federal and state governments could prosecute people for this crime in Fox v. Ohio. The power to punish people for both this crime, piracy, and felonies committed on the high seas are granted to Congress in Article One, Section Eight of the Constitution. The Secret Service was originally created to stop this crime. During the 1990s, watermarks started being used to make this crime more difficult. This crime became more difficult after 1877 when the Bureau of Engraving and Printing was given the exclusive power to print money. Name this crime in which fake money is made.

counterfeiting (money)
[accept forgery of money
or forging money; prompt
on fraud]



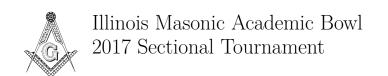
# **Question #21: Mathematics – Analytic Geometry**

10 points per part

The	system of longitude and latitude, together	
with	altitude, is equivalent to this system.	
1	Name this coordinate system in which points	spherical coordinate
	are located using the distance from the origin,	system or <b>spherical</b>
	one angle that is the same as the angle in polar	coordinates
	coordinates, and another angle measured down	
	from the positive half of the $z$ -axis.	
2	To ensure that there's only one way to specify	2  pi radians [or $2  times  pi$
	each point, it's usually required that the radius	or <u>twice pi</u> or similar
	be non-negative, the angle from the positive	phrasings; accept <u>360</u>
	z-axis be between 0 and pi, and the polar angle	degrees]
	be between 0 and what value?	
3	Consider the top half of the cone generated by	$\pi/4$ radians or $1/4$ $\pi$
	the Cartesian [kar-TEE-zhun] equation	radians or $\underline{45}$ degrees
	$z^2 = x^2 + y^2$ . What is the angle between the	
	positive $z$ -axis and any point on that cone?	

## **Question #22: Mathematics – Analytic Geometry**

	sider a square with vertices at the origin, the	
poir	at $(1,0)$ , the point $(1,1)$ , and the point $(0,1)$ .	
1	Find the area of the shape created by	<u>24</u>
	transforming that square with the matrix whose	
	top row is 5, 2, and whose bottom row is 3, 6.	
2	The fast way to find that answer is to use this	<u>det</u> erminant
	property of the matrix, which can be calculated	
	in this case with the formula $ad - bc$ .	
3	Because the determinant was positive, the	reflection [accept word
	transformation represented by the matrix does	forms, accept
	not include this type of transformation.	Householder or flip



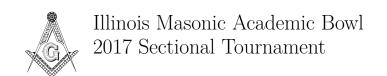
### **Question #23: Literature – U.S. Literature**

10 points per part

This	s criminal claimed that "God never made a	
fine	r woman" than his mother, and his father's	
hear	rt was pure gold.	
1	Name this character who tells Bobby Lee to	The <b>Misfit</b>
	bury a grandmother, and describes her as a	
	good woman, "if it had been somebody there to	
	shoot her every minute of her life".	
2	The Misfit and his accomplices shoot a family	Flannery O'Connor
	to death in this author's story "A Good Man Is	
	Hard to Find." This author also wrote the	
	collection Everything That Rises Must	
	Converge.	
3	The victims in "A Good Man is Hard to Find"	<u>Florida</u>
	were on their way to this state, despite the	
	grandmother's desire to head to Tennessee.	

#### **Question #24: Literature – U.S. Literature**

This	s character's mother called him the "Temper	
Tan	trum Kid" and "Mr. Fly-Off-the-Handle".	
1	Name this character who sees the psychiatrist	<u>Alex</u> ander <u>Portnoy</u>
	Dr. Spielvogel [SPEE-ul-VOH-gul] on account	[accept either underlined
	of his Oedipus [ED-uh-puss] complex, and finds	portion]
	an interesting way to use a piece of liver.	
2	Alexander Portnoy was created by this author	Philip (Milton) <b>Roth</b>
	who wrote about Nathan Zuckerman in $The$	
	Human Stain and American Pastoral.	
3	Many Philip Roth characters grew up with this	$\underline{\mathbf{Jew}}$ ish [or $\underline{\mathbf{Judaism}}$ ]
	religion, including the character he named for	
	himself in <i>Operation Shylock</i> .	



#### **Question #25: Social Studies – Economics**

10 points per part

This	s Latin word means "let it become".	
1	Give this term that describes a monetary	fiat [FEE-ut] money or
	system set up by government decree rather	<u>fiat</u> currency
	than backed by a commodity. U.S. currency has	
	been this type of money since 1971.	
2	Between 1934 and 1971, U.S. currency was	gold standard
	backed by a "standard" of this metal, with its	
	price fixed at \$35 per ounce.	
3	When the U.S. left the gold standard, it ended	Bretton Woods
	a system set up in 1944 at this ski resort in the	Mountain Resort
	town of Carroll, New Hampshire.	

#### **Question #26: Social Studies – Economics**

If a	market features this concept perfectly, every	
part	ticipant has complete information and there	
are	many buyers and sellers.	
1	Name this condition in which there is rivalry	perfect <b>competition</b>
	between sellers. This condition does not exist	
	for monopolies, and it is limited in duopolies or	
	oligopolies.	
2	In this type of economic agreement, companies	<u>cartel</u> s
	increase profits by agreeing to fix prices instead	
	of competing. OPEC, the oil organization, is an	
	example.	
3	Anne Krueger coined this term for behavior in	rent-seeking behavior
	which a person or company acts to benefit itself	[accept similar answers
	without increasing overall wealth or efficiency	related to economic <u>rent</u> ]
	— for instance, by promoting regulations that	
	would decrease competition.	



## **Question #27: Science – Biology**

10 points per part

The	version of this cell that humans produce has a	
tail	about 10 times as long as its body.	
1	Name the male reproductive cell.	<b>sperm</b> cell or
		spermatozoon or
		<u>sperm</u> atozoa
2	Sperm cells have one set of unpaired	haploid [HAP-loyd] cells
	chromosomes, so they are known by this term.	[accept haploidy]
3	The front of a sperm cell is covered with this	acrosome [AK-roh-sohm]
	cap. It contains enzymes to help the cell get	
	through the ovum's tough outer layer.	

# **Question #28: Science – Biology**

This	s phylum includes many familiar worms like	
eart	hworms and leeches.	
1	Name this phylum of segmented worms.	annelids ["AN-uh-lids"] or Annelida ["an-uh-LEAD-uh"] [prompt on ringed worms]
2	Many annelids move by this motion, consisting of a series of contractions and expansions. This same motion is used by the human esophagus to move food.	peristalsis ["pair"-ih-STAL-siss]
3	While moving, annelids get traction from these structures on their bodies. They are similar to hair or bristles.	setae [SEE-tee]



# Round 7 5th Section Toss-up Questions

#### **Question #29: Literature – British Literature**

10 points

Near the end of this novel, an insurance company	Vanity Fair
reluctantly pays after a character dies in	
Aix-la-Chapelle ["ex" lah shah-pel], and another	
character dies of yellow fever at Coventry Island.	
The character who died at Aix-la-Chapelle ran from	
cannonfire during the Battle of Waterloo before	
returning to a post in India. This novel begins at	
Miss Pinkerton's academy for young ladies, on	
Chiswick [CHIZ-ik] Mall. Its two main characters	
marry Rawdon Crawley and George Osborne. The	
main characters of this "Novel Without a Hero" are	
Amelia Sedley and Becky Sharp. Name this novel	
by William Makepeace Thackeray.	

# **Question #30: Mathematics – Math Concepts**

10 points

The radical axis is the line from which the tangents	<u>circle</u> s
drawn to two of these shapes are equal in length. In	
any triangle, the midpoints between each vertex	
and the orthocenter, the feet of the altitudes, and	
the midpoints of all sides lie on one of these shapes.	
That is the nine-point one. In polar coordinates,	
the equation $r = $ any positive number generates	
this kind of shape. These shapes are conic sections	
with eccentricity zero. In Cartesian coordinates, the	
equation $x$ squared plus $y$ squared equals some	
positive number produces this kind of shape. Name	
this shape whose area equals pi times the radius	
squared.	



# Round 7 5th Section Toss-up Questions

#### **Question #31: Social Studies – World History**

10 points

A 1992 coup [koo] attempt in this country against Carlos Andrés Pérez was unable to free from prison the person rebels wanted to put in charge. A 2002 coup placed Pedro Carmona in charge of this country for two days. An 1895 crisis named for this country revolved around whether the Schomburgk [SHOM-burk] Line should be its eastern border, and it led President Cleveland to expand the Monroe Doctrine. Though now joined by Ecuador, this was the only founding member of OPEC in the Western Hemisphere. Name this country currently headed by Nicolás Maduro, who used to be its vice president under Hugo Chávez.

(Bolivarian Republic of)

<u>Venezuela</u> [or (República
Bolivariana) de

<u>Venezuela</u>]

## Question #32: Science – Biology

10 points

Sphingomyelin [sfeen-goh-"MY"-uh-lin] is an example of this class of molecules. A compound of this type containing a serine [SAIR-een] is flipped from the cytosolic ["site-oh-SAW-lick"] face to the extracellular face of the cell before apoptosis [ay-pop-TOE-sis]. The level of saturation in the "tails" of these compounds contribute fluidity found in liposomes ["LIE"-poh-sohmz] and vesicles [VESS-ih-kulz]. These compounds typically consist of a glycerol [GLIS-uh-rawl] bound to two fatty acids and a charged group, and their amphiphilic [am-fuh-FIL-ik] nature makes them naturally form bilayers. Name these phosphate-containing molecules that form the cell membrane.

phospholipids [prompt on lipids]



# Round 7 Extra Section Toss-up Questions

#### **Extra Question #1: Mathematics – Math Concepts**

10 points

This function can be evaluated on the unit circle by finding the length of a segment along the terminal side of an angle from the origin to the line x=1. An antiderivative of this function is the natural log of the absolute value of this function plus the tangent function. The derivative of this function is this function times the tangent function. This trigonometric function is undefined for the same inputs that the tangent function is undefined, because the two can be thought of as having the same denominator. For an acute angle in a right triangle, this function is the ratio of the hypotenuse to the adjacent side length. Name this function that is the reciprocal of the cosine function.

secant [accept answers
that additionally mention
a variable; do not accept
"cosecant"]

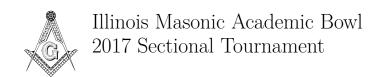
### Extra Question #2: Fine Arts – Classical Music & Opera

10 points

The last concerto by this composer is his 1887

Double Concerto for Violin and Cello in A minor,
which, like several earlier pieces, he wrote for the
violinist Joseph Joachim [YOH-sef YOH-ah-keem].
This composer's Saint Anthony Variations are also
known as Variations on a Theme by Haydn. This
composer wrote two overtures in 1880, saying "one
laughs while the other cries"; those works are the
Tragic Overture and the Academic Festival
Overture. Name this composer of A German
Requiem, whose song "Good evening, good night" is
also known as his Lullaby.

Johannes Brahms



# Round 7 Extra Section Toss-up Questions

#### Extra Question #3: Literature – British Literature

10 points

The narrator of this work describes being "in lonely rooms, and 'mid the din of towns and cities", and he compares a good man's "little, nameless, acts of kindness and love" to "feelings of unremembered love". The speaker of this poem describes hearing "waters, rolling from their mountain-springs", a sound he had not heard in five years. The last section of this poem is addressed to the writer's sister Dorothy. Name this poem written near the River Wye, "a few miles above" the title structure, by William Wordsworth.

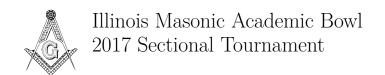
"Lines Written a Few Miles Above <u>Tintern</u> <u>Abbey</u>(, on Revisiting the Banks of the River Wye During a Tour, July 13, 1798)" [prompt on <u>Lines</u>]

### Extra Question #4: Social Studies – World History

10 points

A book attributed to this person "and the Strasbourg Lunation" Tracts warns against a Turkish invasion and is called the *Türkenkalender* [TOOR-ken-KAH-len-dar]. This person was helped by Peter Schöffer, who profited from this man's work due in part to a lawsuit by Schöffer's father-in-law, Johann Fust [YOH-hahn foost]. Cardinal Mazarin's [maz-ar-an'z] library contained a Bible made by this person that is sometimes called the 42-Line Bible because of the number of lines on each page. Name this 14th-century resident of Mainz ["mine"ts], who made bookmaking much more efficient through his development of a printing press.

Johannes (Gensfleisch zur Laden zum) **Gutenberg** 

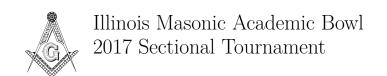


# Round 7 Extra Section Toss-up Questions

### Extra Question #5: Science - Earth Science

10 points

Before becoming these types of rocks, materials go	<b>sedimentary</b> rock
through diagenesis ["die"-uh-"genesis"] and then	
lithification [LITH-ih-fih-KAY-shun]. Chert,	
including flint, is an example of this type of rock.	
This type of rock is the most commonly seen rock,	
though others are more common inside the Earth,	
and the most common type of it is limestone. This	
type of rock forms from solution precipitate or from	
accumulation. Name this category of rock that	
includes sandstone, and which is neither igneous	
[IG-nee-uss] nor metamorphic [met-uh-MOR-fik].	



# Extra Question #6: Social Studies – U.S. History

10 points per part

Pau	l Allen and Bill Gates started this company in	
1975	5.	
1	Name this company that in 1998 was sued by	Microsoft Corporation
	the U.S. Department of Justice over its	
	bundling of Windows and Internet Explorer.	
2	Microsoft was accused of bundling its software	Netscape
	in order to run this company out of business.	Communications
	This company's Navigator browser was very	Corporation
	popular during the 1990s.	
3	Netscape was eventually purchased by this	America Online [accept
	company, which at the time was led by Steve	AOL]
	Case. This company was a popular internet	
	service provider in the 1990s, partly due to its	
	practice of distributing many floppy disks, and	
	later CD-ROMs, with its software.	

### Extra Question #7: Social Studies – U.S. History

This	s scandal is named for a hotel and office	
com	plex in Washington, D.C.	
1	Name this 1974 scandal that led to the	<u>Watergate</u>
	resignation of a U.S. President.	
2	Much of the information on Watergate was	Deep Throat
	discovered through an anonymous source who	
	was, at the time, identified by this nickname in	
	Washington Post reports. He was identified	
	much later as W. Mark Felt.	
3	The Committee to Re-Elect the President	White House <b>Plumber</b> s
	directed this group — known by a nickname —	
	to break into Democratic Party offices.	



## Extra Question #8: Mathematics - Probability

10 points per part

This	s term refers to the set of all possible outcomes	
of a	n experiment.	
1	Give this term from set theory and probability.	sample space or
	For a single coin toss, it has two elements:	<u>universal</u> set or <u>universe</u>
	heads and tails.	
2	The probabilities of each individual element in	<u>1</u>
	the sample space always add up to this number.	
3	This term refers to the set of elements that are	absolute <b>complement</b> [or
	not in a given set, but are in the universal set.	<u>complement</u> ary set]
		_

## Extra Question #9: Mathematics – Probability

Cor	tinuous random variables have density	
func	ctions, while this kind of random variable has a	
mas	ss function.	
1	Give this term for quantities that occur in	<u>discrete</u> (variables or
	separate, quantized amounts instead of along a	quantities)
	continuous spectrum.	
2	Suppose a discrete random variable can take on	0 <u>.1</u> [or <u>1/10</u> ]
	the values 1, 2, and 3 and no other values. If	
	the probability of 1 is 0.4 and the probability of	
	2 is 0.5, then what is the probability the	
	random variable takes on the value 3?	
3	In that same distribution, what is the expected	1.7 [or $17/10$ or $17/10$ ]
	value? Remember that the probability of 1 is	
	0.4, the probability of 2 is 0.5, and the	
	probability of 3 is 0.1.	