SUBMIT 2014: "sometimes referred to as Groper[citation needed]"
Packet by Illinois B and Penn B
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Tossups

1. **It's not Acre, but this city managed to hold the Tower of Flies for twelve days before losing the War of St. Sabas to a rival navy. It's not in the Latin Empire, but this city signed with Michael VIII Palaeologus the 1261 Treaty of Nymphaeum, and it won decisively at the Battle of Meloria. Simone Boccanegra ruled this city until his untimely death by poison. The black death likely entered Europe from this city's trading post at** (*) Caffa, one of its several Black Sea colonies. Andrea Doria reformed the constitution of this city, which controlled the island of Corsica for several centuries. A consul of this city founded the current ruling family of Monaco, the House of Grimaldi. For 10 points, name this Ligurian city that was the birthplace of Christopher Columbus.
ANSWER: Most Serene Republic of **Genoa** (or Repubblica di **Genova**)

2. **Hydroxybenzotriazole is added in one part of this process to increase stereospecificity in a step which forms an O-acylisourea using a carbodiimide, such as DCC or DIC. Another step of this process creates a dibenzofulvene intermediate after beta elimination activated by a weak base, typically piperidine. This process is terminated with the cleavage of an ester bond with trifluoroacetic acid. This procedure, developed by Robert Bruce** (*) Merrifield, is characterized by repeated couplings of amines to carboxylic acids and deprotection of either t-BOC or Fmoc. This procedure begins by attaching a carboxylic acid to an insoluble bead, often polystyrene resin. For 10 points, name this procedure which assembles biological polymers by attaching amino acids onto a non-liquid support.
ANSWER: solid-phase **peptide synthesis** (prompt on "SPPS")

3. **In this novel, a witch attempts to cure a sick cow by singing about "a little hare." In the chapter "Iced Rowanberries," a man axe-murders his family after seeing a man tied to his own amputated limbs. In this novel's epilogue, a bandit bites a girl to death before being tied to some train tracks. A dressmaker named Amalia attempts to commit suicide by iodine in this novel, but is saved while the protagonist and** (*) Misha Gordon watch. One character in this novel takes the name Strelnikov, or "shooter;" that character is Pasha Antipov. In this novel, the protagonist is conscripted into the Forest Brotherhood and falls in love with a woman who shot Victor Komarovsky at a Christmas Party. For 10 points, name this novel featuring the romance of Lara and the title character, a work of Boris Pasternak.
ANSWER: *__Doctor Zhivago__*

4. **A shrine dedicated to this god was guarded by birds that shot darts from their feathers. This god tried to join the Trojan War to avenge the death of his son Ascalaphus at the hands of Deiphobus, but he was stopped by Athena. A son of this god was dragged to death by his horses after losing a chariot race to Pelops. This deity slew Halirrhothius as revenge for the rape of his daughter** (*) Alcippe, resulting in the first murder trial in history. This deity was wounded in the thigh by Heracles after attempting to avenge the death of Cycnus. This god was trapped in a bronze urn for thirteen months by the Aloadae until being freed by Hermes. Hephaestus used a net to catch Aphrodite in bed with this figure, who was often accompanied in battle by Deimos and Phobos. For 10 points, name this Greek god of war.
ANSWER: **Ares** (accept **Mars**)

5. **This painting's patron ordered one figure to be depicted in a smaller chair to emphasize a power discrepancy. A large gallery of observers watch the title event from behind teal curtains in its background,**

and a massive candelabra on the right side of this painting stands behind four of the title figure's officials. Although she was not at the event, this figure's mother was painted in. Figures in the background of this painting hold various objects of power, including a globe and an eagle-topped (*) sceptre. Although he probably did nothing at the event depicted in this painting, Pope Pius VII is shown bestowing a blessing upon its title figure. For 10 points, name this painting by Jacques-Louis David in which a Frenchman crowns his wife, Empress Josephine.

ANSWER: The **Coronation of Napoleon** (or The **Consecration of Napoleon** and the Coronation of Empress Josephine; or **Le sacre** de Napoleon)

6. **Pathogen associated molecular patterns induce paneth cells to produce REG 3 gamma proteins like HIP/PAP to attack this substance, which they recognize by a conserved EPN motif. Proteins that bind to it are responsible for the removal of D-alanine to a precursor in its formation. Organisms that don't have this substance usually have** (*) lipopolysaccharides in its place. Some molecules break down this substance by preventing cross-linking of molecules of *N*-acetylglucosamine and *N*-acetylmuramic acid. Those drugs are beta-lactams. It can be tested for by soaking the sample in crystal violet, applying an iodine mordant, soaking in alcohol, and counterstaining with safranin. That procedure is Gram staining. For 10 points, name this substance found in the cell walls of bacteria.

ANSWER: **peptidoglycan** (accept **murein** before mentioned)

7. **One character in this novel dreams that he is eating at a cafe table in a cathedral while the congregation taps in Morse code. The protagonist of this novel fights a starving dog for a bone in a deserted house before visiting the home of Mr. Lehr. At the end of this novel, a boy who had earlier mocked the story of a child martyr spits at a passing policeman and lets a "tall pale thin man" into his house. In this novel, the main character briefly lives in the barn of Coral** (*) Fellows and struggles to win the affection of his impish daughter Brigida. This novel opens with the English dentist Mr. Tench walking to a wharf, and the protagonist is later tricked into following the yellow-toothed mestizo to a cave where he is arrested by the Lieutenant. For 10 points, name this novel in which the Whiskey Priest is hunted down in Mexico, a work of Graham Greene.

ANSWER: The **Power and the Glory**

8. **This work argues that onomatopoeia and interjections are arbitrarily connected to their underlying meanings. This work uses the example of the French word *pas* to argue that only synchronic relations between words are relevant, and not diachronic relations. This work distinguishes a set of interpersonal rules of language as a system and a manifestation of the system of speech and writing with the terms *langue* and** (*) *parole*. It's not *Of Grammatology*, but this work explains that an idea cannot be understood without a signifier, which cannot be understood without the signified idea, and that the bond between the signifier and the signified is arbitrary. This work argues that language is a structured system of arbitrary signs. For 10 points, name this posthumously published book, based on notes taken from lectures by Ferdinand de Saussure.

ANSWER: **Course in General Linguistics** (or **Cours de Linguistique Générale**)

9. **This political party's close association with the Tenth Credit Cooperative led to scandal after that bank's collapse. This party imprisoned eight opposition party members following a protest on Human Rights Day in the Kaohsiung Incident. This party's monopoly on goods like cigarettes led to a backlash that culminated in forces loyal to this party massacring civilians in the 228** (*) Incident. The Democratic Progressive Party currently leads the opposition to this party's Pan-Blue Coalition in its country's parliament. Currently led by Ma Ying-jeou, for 10 points, name this political party founded by Sun Yat-sen and once led by Chiang Kai-shek, that has ruled Taiwan virtually unopposed since 1949.

ANSWER: **Kuomintang** of China (accept **KMT** or **Guómíndǎng**)

10. **In this film a man in a public bathroom seems to be amused by the protagonist's using a very small razor to shave his face. A character in this film says his middle initial, "O," stands for "nothing." A man at a bus stop in this film notes that a plane is dusting crops where there aren't any. This film's protagonist says that "in the world of advertising, there's no such thing as a** (*) lie. There's only expedient exaggeration." In this film, one man throws a knife at the back of a diplomat with whom the protagonist is speaking. A biplane crashes into an oil truck after chasing this film's protagonist. In this film, Roger Thornhill is mistaken for a man named George Kaplan and kidnapped. For 10 points, name this Alfred Hitchcock film that features a dramatic chase scene on Mt. Rushmore.
ANSWER: *__North by Northwest__*

11. **This geographic feature is the origin of the Sebou River, which is the largest in its region. The Draa Valley is found within the lesser version of this mountain range, and the Kabylia region, located within this range, is a major exporter of cork. Sub-ranges within this range include the High, Middle, and Tell ranges. These mountains were once the home to a now-extinct species of bear, the only kind found within its continent. Mountains in this range include** (*) Tazaghart, Afella, and Ouanoukrim. Marrakesh, Fes, and Rabat are major cities in the west of this range, whose tallest mountain is Toubkal. For 10 points, name this mountain range of northwest Africa that shares its name with the mythological titan that holds the Earth.
ANSWER: **Atlas** Mountains

12. **This leader instituted new taxes on farmable land and individuals called the *jugum* and the *capitatio*, and received gifts from the Sassanid king Bahram II. Near the end of his life, he unsuccessfully attempted to ease tensions with a compromise at Carnuntum. Under this man's rule the saints Nabor and Felix were martyred and the Carausian Revolt took place in Britain. This emperor attempted to fight** (*) inflation and prevent exploitation of consumers with the Edict on Maximum Prices. After voluntarily resigning, this emperor's throne was contested by his co-emperor's son Maxentius. His reign saw the formation of the tetrarchy, and he restored Roman government after the problems of the third century. For 10 points, name this Roman emperor from 284 to 305, who ruled during the last major persecution of Christians.
ANSWER: **Diocletian** (or Gaius Aurelius Valerius **Diocletian**us)

13. **He's not Sigmund Freud, but in one of his works he described the issues with human intimacy through the example of a group of porcupines huddling together for warmth. That concept, known as the Hedgehog's dilemma, is found in a work named for "Appendices and Omissions" in Greek. Another work of his describes the methods of attaining the title condition via a dialectic that branches off between "ad rem"and "ad hominem." In addition to writing** (*) *Parerga and Paralipomena* and *The Art of Being Right*, this man studied Indian philosophy before claiming "every action can only take place in consequence of a sufficient motive" in his most famous work. That work asserted that we should only strive to know the present and that an idea exists only in relation to an object and subject. For 10 points, name this German philosopher and author of *The World as Will and Representation.*
ANSWER: Arthur **Schopenhauer**

14. **This poet wrote "the Truth sets Fact free from its fetters" in the poem "Baby's World." In another work of this poet, the speaker claims that "bees are plying their minstrelsy" and asks for a "moment's indulgence" from his lover. One poem by this author describes "flood waters twisting-and swirling everywhere" and ends with the speaker unable to board the title vessel, which is already full with his "gold paddy." In one poem by this author of "The Golden Boat," the narrator describes a place** (*) "where the mind is without fear" and prays "let my country awake" there. In another poem, he wrote of a "frail vessel thou emptiest again and again." That poem begins "Thou hast made me endless, such is thy pleasure." and appears in a collection with a preface by W. B. Yeats. For 10 points, name this author of *Gitanjali*, who also wrote the national anthems of India and Bangladesh.

ANSWER: Rabindranath **Tagore** (or Ravindranatha **Thakura**)

15. **One interpretation of this piece clarifies its seemingly illogical structure in terms of the opposite traits of its movements. The shortest movement of this work is in 6/8 and features sections in both simple and compound time. The sixth section of this suite evokes a series of magic tricks, culminating in the magician's departure in a fireball. The final movement features a** (*) women's choir and maintains a low dynamic for its entirety, eventually fading out into silence. This movement contrasts with the first, which features an ostinato in 5/4. Colin Matthews composed a final movement for this suite in 2000, seventy years after the discovery of Pluto first made an extra section a possibility. For 10 points, name this Holst suite written about a collection of astronomical bodies.
ANSWER: The _**Planets**_

16. **The square of this quantity multiplied by density times the Fanning friction factor over two equals the shear stress at the wall of a pipe. Multiplying the square of this quantity by density over the bulk modulus gives the Cauchy number. The divergence of this quantity times density plus the time derivative of density** (*) equals zero according to one of Euler's equations, and Bernoulli's equation is quadratic in this quantity. If the divergence of this quantity is zero, the flow is incompressible. In a horizontal pipe, an increase in this quantity will be accompanied by a decrease in pressure. Taking the curl of this quantity gives the vorticity. For 10 points, give this quantity that expresses the rate at which a fluid flows.
ANSWER: fluid **velocity** (or flow **velocity**; or **velocity** field; prompt on "u"or "v")

17. **One poem by this author ends "he spoke. And drank rapidly a glass of water." In that poem, a man praises the "heroic happy dead" and expresses his love for the "land of the pilgrims." One poem by this author contains the line "straightway the silver bird looked grave" and features a narrator who prays to see "Christ (of His mercy infinite)." In one poem, this author wrote of a man who rode a "watersmooth stallion" and asks "how do you like your** (*) blueeyed boy / Mister Death?" One of this poet's title characters repeats "there is some shit I will not eat" after stating "I will not kiss your fucking flag" and is said to be, "unless statistics lie," "more brave than me: more blond than you." In another work of his, the husband of "noone" lives in a place with "up so floating many bells down." For 10 points, name this poet of "i sing of olaf glad and big" and "anyone lived in a pretty how town."
ANSWER: Edward Estlin **Cummings**

18. **The second section of this work asserts that humans are God's "workmanship" and that Jesus broke the "wall of partition" separation humans.The last chapter of this book contains references to the Shield of Faith, Helmet of Salvation, Sword of the Spirit, and Armor of God as well as a conclusion addressing Tychicus. Chapter 5 of this book contains the much maligned verse, "Wives should be** (*) subordinate to their Husbands as to the Lord," part of an extended metaphor comparing human marriage to the marriage of Christ and his Church. This Letter commands the readers to "Walk then as children of light," since they are part of the Body of Christ. This letter is believed to have been written during its author's first imprisonment in Rome. For 10 points, name this "Queen of Epistles" written by St. Paul to a Church in Asia Minor.
ANSWER: Letter to the **Ephesians**

19. **This event was depicted in a documentary directed by James Blue that included an introduction by Carl Rowan. Ledger Smith notably rollerskated to this event, and The Action Committee on Solidarity led a demonstration in Amsterdam in support of this event. The meeting to set up this event at the Carlyle Hotel was criticized in the Message to the Grassroots. One speech edited by Tom** (*) Kahn from this event declared that "we cannot be patient" and mentions C. B. King. Organized by Bayard Rustin and A. Philip Randolph, this event also featured a speech that mentions "a check which has come back insufficient funds" and to "let freedom

ring from Stone Mountain." For 10 points, name this 1963 event at which Martin Luther King, Jr. gave his "I Have a Dream" Speech.
ANSWER: 1963 **March on Washington**

20. **The a_4 coefficients for the Fourier series describing a feature of these objects is positive for disky versions and negative for boxy versions. These objects lie on an inclined fundamental plane of three parameters that describe them, and the luminosity-color and mass-metallicity relations can be recovered from that plane. A supergiant one of these notable for two jets coming out of it is** (*) M87. They are characterized by less dust lanes and emission line gas, large dispersion velocities, and older Population II stars. These galaxies are numbered 0 through 7 on the left hand side of the Hubble tuning-fork diagram, where they are classified based on their semi-major and semi-minor axes. For 10 points, name these elongated galaxies which are rounder than spirals.
ANSWER: **elliptical** galaxies (prompt on "galaxies"; anti-prompt on more specific things like "radio galaxies" or "active galaxies")

21. **Richard Pollak wrote a critical biography of this thinker that attempted to expose him as a "charlatan." This man wrote about raising the mentally disturbed in** *Love Is Not Enough*. **This man discussed autonomy and technology in his** *The Informed Heart*, **which drew on his experiences in concentration** (*) camps. This man talked about treating the title child, who acted like a robot, in "Joey: the Mechanical Boy," and this man introduced the theory of the "refrigerator mother" in his work on autism. He is more famous for a work where he analyzes things like "animal groom" stories and works of the Brothers Grimm. For 10 points, name this Austrian psychologist who discussed fairy tales in his *The Uses of Enchantment*.
ANSWER: Bruno **Bettelheim**

Bonuses

1. A step in this procedure involves the transfer of a substance to a membrane made of PVDF or nitrocellulose. For 10 points each:
[10] Name this procedure, commonly used to separate proteins by molecular weight. It is named after a similar procedure developed at the University of Edinburgh.
ANSWER: **Western blot** (accept **protein immunoblot**)
[10] The relative quantities of protein in each of the bands produced during the Western blot are determined by the amount of light given off by fluorescently-labeled types of these molecules.
ANSWER: **antibodies** (accept **immunoglobulins**)
[10] Gels in a Western blot are washed in a transfer buffer with this substance before the gel's proteins are transferred to the PVDF or nitrocellulose membrane. This simplest amino acid also acts as an inhibitory neurotransmitter.
ANSWER: **glycine** (accept **Gly**, accept **aminoacetic acid**)

2. This album was heavily influenced by classical music techniques. For 10 points each:
[10] Name this jazz compilation album that contains the tracks "Venus de Milo," "Moon Dreams," and "Darn that Dream."
ANSWER: *__Birth of the Cool__*
[10] *Birth of the Cool* was performed by this jazz trumpeter's nonet. He performed songs like "Freddie Freeloader" on the album *Kind of Blue*.
ANSWER: Miles **Davis**
[10] One of the influences of *Birth of the Cool* was this bandleader and pianist who composed "Snowfall." He also composed the Billie Holliday and Fats Waller-performed song "I Wish I Had You."
ANSWER: Claude **Thornhill**

3. Dick Rothenstein advises the protagonist of this novel against flying to Nazi Germany in the *Hindenburg* after one of his books is adopted into a film there. For 10 points each:
[10] Name this novel that opens with the line "It was the afternoon of my eighty-first birthday, and I was in bed with my catamite." It is narrated by Kenneth Toomey, a geriatric gay writer, who is asked to assist in the canonization process of Gregory XVII.
ANSWER: *__Earthly Powers__*
[10] *Earthly Powers* was written by this author of The Malayan Trilogy who also wrote about the ultraviolent Beethoven fan Alex in *A Clockwork Orange*.
ANSWER: Anthony **Burgess**
[10] Alex and his droogs speak this fictional Russian-based argot, which uses words such as "bezoomny" and "chelloveck."
ANSWER: **Nadsat**

4. David Davis lost his chance to be the independent member of this body when he resigned in favor of Philo Bradley. For 10 points each:
[10] Name this temporary body with 15 members that was created to deal with 20 disputed votes in an election involving Samuel Tilden.
ANSWER: **Electoral Commission** of 1876
[10] After the Commission awarded the votes to this candidate, he convinced House Democrats to accept the decision by promising to end Reconstruction. Thanks to that "corrupt bargain," this Republican became president.
ANSWER: Rutherford Birchard **Hayes** (accept "Rutherfraud" **Hayes** from disgruntled Democrats)

[10] As part of his campaign against the spoils system, Hayes ordered this pair, the Port of New York's naval officer and its collector, to resign from party politics and fired them when they refused. Name either.
ANSWER: Alonzo Barton **Cornell** or Chester Alan **Arthur**

5. Name some video games where you drive cars. For 10 points each:
[10] This super popular Nintendo game franchise lets you race as characters like Peach, Yoshi, and Toad, who you should pick because he's the best.
ANSWER: **Mario Kart** (accept individual entries in the series, assuming they're not made up)
[10] This 2008 entry in the Burnout franchise was the only open world Burnout title. It partly shares its name with a Guns N' Roses song that annoyingly plays every time you boot the game up.
ANSWER: Burnout **Paradise**
[10] This classic 1982 arcade racing game, developed by Namco, features Formula 1 racing. You have to complete a time trial before actually getting to race against any other cars. Its title is a term for starting in first place.
ANSWER: **Pole Position**

6. This law was first put forth in Gerald Gardner's novel *High Magic's Aid*. For 10 points each:
[10] Name this law of a certain pagan religion which states that all good or evil that you do will be returned to you the namesake number of times.
ANSWER: **Rule of Three** (or **Law of Threefold Return**; accept clear equivalents)
[10] The Rule of Three is used by members of this pagan religion. The name of this religion is a Middle English term from which the term "witchcraft" is derived, and it believes in a Triple Goddess and a Horned God.
ANSWER: **Wicca**
[10] Samhain and Yuletide are two of the more familiar names of these Wiccan Holidays. The 8 typical versions of these holidays create the "Wheel of the Year."
ANSWER: **Sabbat**hs

7. In a November 2013 paper, Saeedi et al. reported creating one of these devices with a 39-minute lifetime near room temperature. For 10 points each:
[10] Name these units of information, the major component of quantum computers, which can exist in more than the two states of their classical analogues.
ANSWER: **qubit** (accept **qu**antum **bit**)
[10] The increased lifespan of qubits is achieved by avoiding this process. Distinct from wavefunction collapse, this process involves a superimposed system becoming one of the multiple superimposed states.
ANSWER: **decoherence**
[10] Saeedi et al exploited this effect to manipulate the data stored in the qubit. It involves the usage of multiple electromagnetic pulses to defocus and refocus the spin state of the qubit.
ANSWER: **Hahn echo** (accept **spin echo**)

8. The background of this painting features Christ both paying tribute money to a group of soldiers and being stoned by a crowd. For 10 points each:
[10] Name this painting set in an open square where a kneeling figure receives the title object from Christ, a large fresco by Pietro Perugino.
ANSWER: **Delivery of the Keys** (or **Christ Giving the Keys to St. Peter**)
[10] Perugino is perhaps better known as the tutor of this artist who painted included figures like Zoroaster and Hypatia in his S*chool of Athens*.
ANSWER: **Raphael** (or **Raffaello Sanzio** da Urbino, accept either name)
[10] This student of Perugino decorated the Baglioni Chapel. The Christ child carries an apple and sits on St. Christopher's shoulders in a crucifixion of his which also features St. Jerome emerging from a cave.

ANSWER: **Pinturicchio** (or **Bernardino** di Betto)

9. The founder of this group claimed to have a vision of Gabriel shortly after the *HMS Lord Worsley* was plundered against his wishes. For 10 points each:
[10] Name this movement founded by Te Ua. Its members believed that Jehovah would protect them from bullets if they repeated the word "Hapa," a theory that was debunked when they were massacred at Sentry Hill.
ANSWER: **Pai Mārire** (or **Hauhau**)
[10] The participants in the Pai Marire movement belonged to this indigenous people of New Zealand.
ANSWER: **Māori**
[10] The Pai Mārire, as well as later movements like the Ringatū and Rātana, were understandably upset about the violations of this 1840 treaty. William Hobson became governor of New Zealand after it was signed.
ANSWER: Treaty of **Waitangi**

10. This novel opens with Mrs. Kronborg giving birth to her son Thor. For 10 points each:
[10] Name this novel in which Ray Kennedy bequeaths six hundred dollars to Thea Kronborg to study in Chicago, after Ray dies in a train accident. She originally wants to study piano, but Thea becomes a famous singer after Andor Harsanyi hears her voice.
ANSWER: *The Song of the Lark*
[10] *The Song of the Lark* was written by this American author who was known for her novels of frontier life on the Great Plains. She wrote *O Pioneers!* and *My Antonia*.
ANSWER: Willa **Cather**
[10] This is the name of the doctor who is assists Mrs. Kronborg in giving birth in the opening scene. He eventually takes part in a venture in the San Felipe silver mine. By the end of the book, he helps Governor Alden get elected.
ANSWER: Dr. **Howard** **Archie** (either underlined part)

11. These bodies commonly have high values on the Herfindahl index, but generally less than 10,000. For 10 points each:
[10] Name these limitedly-competitive market entities that exist in the markets for healthcare insurance, cereal, and tennis balls.
ANSWER: **oligopolies** (accept word forms)
[10] If two firms in a duopoly are selling their product at the profit-maximizing price, then the decision to lower prices is this kind of strategy. In the prisoner's dilemma, this type of game theory strategy would be to betray the other prisoner.
ANSWER: **dominant** strategy (or **dominance** strategy)
[10] A common way to determine the dominant strategy and to determine Nash equilibria is to construct this kind of chart. This matrix has one firm's choices on the horizontal rows and the other's on the vertical columns.
ANSWER: **payoff** matrix

12. Answer the following about a man who 17th century Americans might have known as the Angel of Hadley, William Goffe. For 10 points each:
[10] Goffe was hiding in the Massachusetts woods because of his role in the death of this man. This king was condemned to death by 59 regicides, including Goffe, after his capture at the end of the English Civil War.
ANSWER: **Charles I** (prompt on "Charles")
[10] As one of the regicides, Goffe was exempt from this proclamation that Charles II authored at the behest of George Monck. In this document, the future king agreed to pardon all those who recognized him as sovereign.
ANSWER: Declaration of **Breda** (do not accept "Treaty of Breda")
[10] During the Interregnum, Goffe helped break up Barebone's parliament, which had succeeded this other body. This parliament was formed from the remnants of the Long parliament after Pride's Purge.

ANSWER: **Rump** Parliament

13. Along with his cousin, this man held Hermione hostage, after their failed attempt to kill Helen. For 10 points each:
[10] Name this son of Strophius, who was arranged to marry Electra by Apollo, after the debacle with Hermione's abduction and Helen's attempted murder.
ANSWER: **Pylades**
[10] Pylades helped his cousins Orestes and Electra avenge the death of their father Agamemnon, who was killed by this woman, their mother.
ANSWER: **Clytemnestra**
[10] This concubine of Agamemnon prophesied their murder, but unfortunately no one believed her as Apollo had cursed her to never be believed after he failed to seduce her.
ANSWER: **Cassandra**

14. These numbers are sometimes visualized using diagrams named for Jean-Robert Argand. For 10 points each:
[10] De Moivre's formula states a trigonometric relation involving this type of number that can be expressed in the form a plus $b\,i$.
ANSWER: **complex** numbers
[10] This type of series can express complex functions with a power series that has negative degree terms.
ANSWER: **Laurent** series
[10] This theorem from complex analysis states that: given analytic functions f and g on a contour C where the absolute value of f of z is greater than the absolute value of g of z for all z in C, then f and f plus g have the same number of zeros inside C.
ANSWER: **Rouché**'s theorem

15. In one story from this collection, a hospitalized man hears two dogs begin to talk at the stroke of midnight. For 10 points each:
[10] Name this collection written during Spain's Golden Age of literature which contains stories such as "Dialogue between Scipio and Berganza" and "The Lawyer of Glass."
ANSWER: *Exemplary Novels* (or *Novelas ejemplares*)
[10] The author of the *Exemplary Novels*, Miguel de Cervantes, also wrote about this windmill-tilting knight who rides a skinny horse named Rocinante.
ANSWER: **Don Quixote** (accept *The Ingenious Gentleman Don Quixote of La Mancha* or *El ingenioso hidalgo don Quijote de la Mancha*)
[10] This influential Golden Age poet brought Latin poetic forms to Spain and pioneered verse forms such as the estancia and lira when he wasn't busy serving as a soldier under Charles V.
ANSWER: **Garcilaso** de la Vega (prompt on "Vega" but definitely do not accept things like "Lope de Vega")

16. This dynasty was apocryphally founded when its namesake prince happily obliged the Slovenes' request for him to come reign over them. For 10 points each:
[10] Name this dynasty, whose later members include Vasili Shuisky and the mentally challenged Feodor the Bellringer. Its kings ruled Kievan Rus and later the Grand Duchy of Moscow.
ANSWER: **Rurik**id dynasty
[10] The Rurikid dynasty fell apart during this catastrophic interregnum. This period was ended by the ascension of Michael Romanov.
ANSWER: **Time of Troubles**
[10] This father of Michael Romanov was the de facto ruler of Russia for most of his son's reign. This man returned to Russia after the signing of the truce of Deulino and was declared Patriarch of Moscow.

ANSWER: Patriarch **Filaret** of Moscow (or **F**eodor Nikitich **Romanov**, prompt on "Romanov")

17. Moderator: FOR THE FIRST PART, **DO NOT READ** THE UNDERLINED TEXT IN PARENTHESES UNLESS GIVEN BY THE PLAYER.
The Count d'Ogny commissioned the creation of this symphony, which opens in tonic G major and modulates through to the parallel minor and dominant. For 10 points each:
[10] Name this last completed symphony by its composer, whose third movement is a minuet and trio that is unusually in ternary form.
ANSWER: *Oxford* Symphony (or Franz Joseph **Haydn**'s Symphony No. **92** in G major)
[10] Despite its name, the *Oxford Symphony* was composed while this man was in Paris, where he wrote symphonies like *The Bear* and *The Hen*. He is better known for the oratorio *The Creation*.
ANSWER: Franz Joseph **Haydn**
[10] The second movement of this member of Haydn's *London* symphonies opens with a toy march before shifting to heavy percussive use of "Turkish instruments" and a trumpet in C minor that calls for a cavalry charge.
ANSWER: *Military* Symphony (or Franz Joseph **Haydn**'s Symphony No. **100** in G major)

18. The title character of this story ends up dying of a cheese knife wound caused by Rachel, the Jewish prostitute. For 10 points each:
[10] Name this short story, whose titular Prussian officer is given a female title by his comrades, despite being a male, due to his effeminacy.
ANSWER: "**Mademoiselle Fifi**"
[10] "Mademoiselle Fifi" is a work by this French author of "The Ball of Fat" and "The Necklace."
ANSWER: Guy de **Maupassant**
[10] The inheritance obtained by the younger brother upon the death of Léon Maréchal causes a rift within the Roland family when the older brother discovers that his younger brother is illegitimate in this Maupassant novel.
ANSWER: *Pierre et Jean*

19. A version of this substance made with atoms of tin could replace copper and gold in the future computing industry. For 10 points each:
[10] Name this material potentially useful for its extremely high electrical and thermal conductivity, as well as its immense strength. It is a single layer of hexagonally-arranged carbon atoms.
ANSWER: **graphene** (prompt on "graphite")
[10] This crystallographic defect in graphene results when two carbon atoms in the lattice shift 90 degrees relative to their neighboring atoms, resulting in pentagons and heptagons rather than hexagons. It is named for two Cambridge chemists.
ANSWER: **Stone–Wales** defect (accept **Stone–Thrower–Wales** defect)
[10] The Stone-Wales defect can theoretically occur in any carbon nanosystems with this type of hybrid bond that exists between the carbon atoms in alkenes
ANSWER: sp^2

20. Along with publishing the ten theses, this philosopher advocated caring for everyone else equally with "impartial concern." For 10 points each:
[10] Name this philosopher who advocated caring for all people equally. On universal love, he said that being filial to one's parents is to be filial to the parents of others. He also explained that universal love is the way to heaven.
ANSWER: **Mòzǐ** (or **Mo Tzu**, or **Micius**, or **Mo Di**)
[10] Mohism fell out of favor when the Qín Dynasty came to power and introduced this school of thought. One member, Hán Fēi, explained that one aspect a ruler was endowed with *shì*, or legitimacy and mystery of authority, in order to command the obedience of the people.

ANSWER: **legalism**

[10] Much of imperial China could be described as being "[this school of thought] on the outside, but legalist on the inside." This philosophy emphasized *lǐ*, *rén*, and *yì*, and was criticized by Mòzǐ.

ANSWER: **Confucianism**

21. This battle's losing side was commanded by Bulcsú and Lél and made the classic mistake of stopping to loot their opponents' baggage train. For 10 points each:

[10] Name this 955 CE battle that took place on a floodplain south of Augsburg; the soon to be emperor Otto the Great made good use of his heavy cavalry to defeat an army that was five times larger.

ANSWER: Battle of **Lechfeld**

[10] Lechfeld brought about the end of this group's raiding into Western Europe. This group then created what would become Hungary.

ANSWER: the **Magyar**s (accept **Hungarian**s before mentioned)

[10] Otto hailed from this German duchy. Otto's father, who defeated the Magyars at Merseburg, was a duke of this state named Henry the Fowler.

ANSWER: Duchy of **Saxony** (or Hertogdom **Sassen**; or Herzogtum **Sachsen**)