

2016 SOLON

PACKET 05:

TOSSUPS:

1. **A contemporary artist from this country coined the term “superflats.” An artist from this country chased a chicken across a canvas to make one work. A series from here depicts the fifty-three stations that connect its capitals. A few boats are (\*) battered by a surging wave in a painting from this home of the woodblock-painting genre *ukiyo-e*. FTP, name this native country of Hiroshige and Katsushika Hokusai, who created *Thirty-Six Views of Mount Fuji*.**

ANSWER: **Japan** (accept **Nippon**-koku or **Nihon**-koku) [RM]

2. **In the standard model, these are the only elementary particles to experience all four fundamental forces. The “sea” variety of these particles are unstable, and deep inelastic scattering provided evidence for their existence . (\*) Gluons “bind” these particles through the strong interaction. These particles possess a color charge and combine to form baryons and hadrons. FTP, name these particles which can come in “strange” and “charm” flavors.**

ANSWER: **Quarks** [CS]

3. **One of this figure’s titles is “raw-eater,” since his followers sacrificed him uncooked meat. As a baby, he was torn apart by Titans, but was resurrected as the “twice-born.” This god granted King Midas a wish for helping his friend Silenus. This god’s mother, (\*) Semele, was mortal, and she died when she asked to see Zeus in his full glory. After that, this god was sewn into Zeus’s thigh. FTP, name this Olympian god of wine, called Bacchus by the Romans.**

ANSWER: **Dionysus** (accept **Bacchus** until mentioned) [TB]

4. **Jane Goodall studied chimpanzees in this country’s Gombe Stream National Park. The first *Homo habilis* skeleton was found in this country’s Olduvai Gorge near the Ngorongoro Conservation Area and (\*) Serengeti National Park. In 1994, this nation’s capital was moved from Dar Es Salaam to Dodoma, and it is home to the highest mountain in Africa, Mount Kilimanjaro. FTP, name this country formed from the merger of Zanzibar and Tanganyika.**

ANSWER: United Republic of **Tanzania** [PP]

5. **This poet wrote of the always-cold Harry Gill and Goody Blake, as well as a girl who “dwelt among the untrodden ways.” This author of the “Lucy Poems” described the climbing of Mount Snowdon in *The (\*) Prelude*, and his sonnets include “London, 1802” and “The World is Too Much With Us.” He described seeing ten thousand daffodils in “I Wandered Lonely As A Cloud.” FTP, name this Romantic poet of “Tintern Abbey.”**

ANSWER: William **Wordsworth** [Harry Gill and Goody Blake are characters in “Harry Gill and Goody Blake.”] [CS]

6. **One type of these objects experiences the “winding problem” as it rotates. Seyfert [SAY-fert] types of these objects contain active central nuclei and contain supermassive black holes at their center. A tuning-fork diagram to classify these objects was designed by (\*) Edwin Hubble, whose namesake law states that these objects are moving away from the Earth. FTP, name these objects can be classified as irregular, elliptical or spiral, and include Andromeda and the Milky Way.**

**ANSWER: Galaxies** [PP]

7. **The Atkinson-Shiffrin three-stage model concerns this process, whose “echoic” form was studied by Ulric Neisser. Loftus’s “Lost in the Mall” experiment studies its “implementation” and the creation of (\*) “false” ones. Ancients used namesake “palaces” to aid this process, whose “working” form is the subject of George Miller’s “Magical Number Seven, Plus or Minus Two.” FTP, name this process that is disrupted by amnesia.**

**ANSWER: Memory** [CS]

8. **This character disappoints his son by refusing to play football for the Methodists, but earns his respect back by shooting Tim Johnson, a rabid dog. This character helps Walter Cunningham with an entailment and employs (\*) Calpurnia as a maid. He argues that a man with a withered left arm could not have raped Mayella Ewell during Tom Robinson’s trial. FTP, name this lawyer, the father of Jem and Scout in *To Kill a Mockingbird*.**

**ANSWER: Atticus Finch** (accept either underlined portion) [RM/TB]

9. **This work’s composer renounced it as “[without] artistic merit” in a letter to his patron Nadezhda von Meck. Written for the Cathedral of Christ the Savior, it opens with the *Troparion of the Holy Cross*. “La Marseillaise” and (\*) “God Save the Tsar” are quoted in this work, which ends with carillons imitating church bells and 16 shots of artillery. FTP, name this Tchaikovsky work celebrating Russia’s defeat of Napoleon that features cannons.**

**ANSWER: 1812 Overture** [CS]

10. **This leader clashed with Arthur Scargill, leader of the NUM, during a labor dispute that featured the Battle of Orgreave. As Education Secretary, this leader became known as the “Milk Snatcher” after school budget cuts, and this leader survived the (\*) Brighton Hotel Bombing carried out by the IRA. As Prime Minister, this leader won the Falklands War and was a Cold War ally with Ronald Reagan. FTP, name this Prime Minister of the UK known as the “Iron Lady.”**

**ANSWER: Margaret Thatcher** [the NUM was the National Union of Mineworkers] [TB]

11. **In a novel from this home country of *The Betrothed*, Marco Polo finds Invisible Cities. In a play from this country, the Maniac gets the police to confess to causing the *Accidental Death***

*of an Anarchist*, by Dario Fo. A copy of the *Poetics* is poisoned by (\*) Jorge of Burgos and William of Baskerville investigates murders in a novel from it. “You” and Ludmilla read books in *If on a winter’s night a traveler*, written in, FTP, what home country of Italo Calvino?

ANSWER: Italy [CS]

12. A Russian blogger, Ruslan Sukolovsky, faces a blasphemy charge for playing this game at the Church of All Saints, and the U.S. Holocaust Museum asked patrons not to play this game there. This game was criticized for discriminating against (\*) disabled people, and this mobile game emerged from a collaboration with Google Maps. This game’s three teams are Mystic, Instinct, and Valor. FTP, name this augmented reality mobile game where you can try to catch ‘em all.

ANSWER: Pokemon Go (prompt on “Pokemon”) [TB]

13. When these entities are connected on a rectangular grid, they form a Ulam Spiral. These entities are commonly found using Fermat’s Little Theorem, and they can also be found using the Sieve of Eratosthenes. (\*) Goldbach’s conjecture states that any number greater than 2 can be written as the sum of two of these numbers, and Euclid proved there are infinitely many of these numbers. FTP, name these numbers that are only divisible by themselves and one.

ANSWER: Prime Numbers [SM/HP]

14. This leader survived an assassination attempt by Mohammed Abdel Latif, a member of a rival political party. He joined his nation with Syria to form the United Arab Republic, and he placed Mohammed Naguib [Nah-GWEEB], leader of the (\*) Muslim Brotherhood, under house arrest. This man provoked Britain and France when he tried to nationalize the Suez Canal, and the Aswan Dam creates a lake named for him. FTP, name this president of Egypt from 1956-1970.

ANSWER: Gamal Abdel Nasser [TB]

15. This process occurs at a faster rate in cancer cells due to the Warburg effect.

Gluconeogenesis is the reverse of this process. The product of this reaction is later converted into acetyl-CoA [ah-SEE-tyl CO-AY]. This process occurs in the (\*) cytoplasm, and is divided into an energy payoff and energy investment period. It yields two net molecules of ATP and NADH. FTP, name this process followed by the Krebs Cycle which converts glucose into two pyruvates.

ANSWER: Glycolysis [RM]

16. Sonny Rollins made an album titled [*this instrument*] *Colossus*. With his cornetist brother, one player of this instrument recorded “Mercy, Mercy, Mercy,” and “Work Song.” One player’s “sheets of sound” on it can be heard on albums like (\*) *Giant Steps* and *A Love Supreme*. Another player of this instrument rewrote “Cherokee” into “Ko-ko,” and recorded “Ornithology.” FTP, name this instrument which John Coltrane and “Bird” Parker played.

ANSWER: Saxophone [The second sentence refers to “Cannonball” Adderley] [CS]

17. This man drank milk that flowed from his fingers while in a cave for thirteen years. An action this man took is celebrated on Eid al-Adha. This brother of Haran and Nahor pleaded with God to find ten righteous men before destroying (\*) Gomorrah and Sodom. This

man took one of his sons on to Mount Moriah or Mount Mina to make a sacrifice. FTP, name this “father of many nations,” the father of Ishmael and Isaac.

**ANSWER: Abraham** (accept **Ibrahim**) [Eid al-Adha celebrates Abraham’s faith in going up the mountain to sacrifice his son] [CS]

**18. The bifluoride anion exhibits a strong form of this interaction, which is responsible for the high crystallinity of nylon. It is found between nitrogenous bases in DNA, and it is also responsible for water’s many special properties like (\*) surface tension and a relatively high boiling point. Ice is less dense than liquid water due to this interaction. FTP, identify this strong dipole-dipole interaction between fluorine, nitrogen, oxygen, and element number 1.**

**ANSWER: Hydrogen bonding** (accept **H-bonds** or **H-bonding**; prompt on **dipole-dipole** before stated) [EF]

**19. During this war, a sudden hailstorm on “Black Monday” killed hundreds during the Siege of Chartres. Taxes levied to pay for this war helped spark Wat Tyler’s Peasants’ Revolt, and 50-year-old John of Bohemia fought at the Battle of (\*) Crecy in this war despite being blind. Joan of Arc fought the Siege of Orleans in this war, and Henry V used longbowmen to win this war’s Battle of Agincourt. FTP, name this very long conflict between France and England.**

**ANSWER: Hundred Years War** [TB]

**20. In a play from this country, Sam and Willie remember making a kite for Hallie, who orders them to call him “Master.” In a novel from this country, the professor David Lurie has an affair with the student Melanie Isaacs. In another novel, Stephen (\*) Kumalo searches for his son Absalom, who killed the white Arthur Jarvis. FTP, name this country, whose natives Athol Fugard, J M Coetzee, and Alan Paton wrote against apartheid.**

**ANSWER: South Africa** (do not accept or prompt on “Africa” alone) [CS]

**Tiebreaker:**

**21. This man led a group of 5,000 Massachusetts soldiers to capture Newport, Rhode Island. This man and Samuel Adams were the initial targets of the British troops marching towards Lexington. This man’s ship, the *HMS* (\*) *Liberty*, was seized by the British on charges of violating the Townshend Acts, and he was charged with smuggling. FTP, name this founding father, most notable for his large signature on the Declaration of Independence.**

**ANSWER: John Hancock** [HP/GP]

**BONUSES:**

**1. Gobind Singh was the last guru of this religion. For 10 points each:**

[10] Name this religion which was founded by Guru Nanak. It is mostly practiced in the Punjab state of India.

**ANSWER: Sikhism**

[10] Guru Gobind Singh stated all initiated Sikhs should wear these items at all times. They include a metal bracelet and a dagger.

**ANSWER: Five K's** (prompt on any specific one of the five K's: "Kesh", "Kirpan", "Kachera", "Kangha", or "Kara," but accept all five together if someone answers that way)

[10] The Sikh tradition of Khalsa has been compared to this practice. In Christianity, people who undergo this practice are immersed in water, usually at a young age.

**ANSWER: Baptism** [HP]

**2. For ten points each, give the following about the wonders of American drama:**

[10] Tony Kushner wrote a seven-hour long play named for *[these creatures] in America*. Edgar Allan Poe accuses these beings of killing "Annabel Lee."

**ANSWER: Angel(s)** (accept *Angels in America*, accept **seraph(s)** or **seraphim**)

[10] This author of *The Matchmaker* and *The Alcestiad* wrote of George and Maggie Antrobus surviving an ice age in *The Skin of Our Teeth*. He wrote *The Bridge of San Luis Rey* and the propless *Our Town*.

**ANSWER: Thornton Wilder**

[10] This playwright of *View from the Bridge* wrote a play in which Joe Keller's refusal to report a faulty airplane part results in twenty-one deaths.

**ANSWER: Arthur Miller** [That play is *All My Sons*] [CS]

**3. This quantity is equal to moment of inertia times angular acceleration. For 10 points each,**

[10] Name this quantity that causes rotational motion around a fixed axis.

**ANSWER: Torque**

[10] Torque is the rotational analogue of this quantity, which is equal to mass times acceleration according to Newton's Second Law of Motion.

**ANSWER: Force**

[10] Torque is also the time derivative of this quantity. This quantity is equivalent to an object's moment of inertia times its angular velocity.

**ANSWER: Angular Momentum** (Do NOT prompt on "momentum") [EF]

**4. For 10 points each, answer the following questions about contemporary Southeast Asian history:**

[10] In this nation, the People's Power Revolution overthrew the dictatorship of Ferdinand Marcos and replaced him with Corazon Aquino.

**ANSWER: Philippines**

[10] The wife of Ferdinand Marcos famously had an extensive collection of these objects. They are currently interred in the National Museum of the Philippines.

**ANSWER: Shoes** (Accept any obvious equivalents)

[10] This nearby island nation, a former Dutch colony, was run under the system of “Guided Democracy” created by Sukarno. Today, it is home to the world’s largest Muslim population.

**ANSWER: Indonesia** [AZ]

5. These volume of a circular one of these objects is equal to one-third times its base radius squared times the height of this object. For 10 points each,

[10] Name this solid, which contains all points from a base to an apex.

**ANSWER: Cone** (Anti-prompt on specific types of cones, like circular cones etc. )

[10] When part of the top of a cone is cut off parallel to the base, one of these shapes is formed.

**ANSWER: Frustum**

[10] When viewed from the side, a frustum may look like one of these 2D shapes. Similarly, cutting a corner off of a triangle will create one of these quadrilaterals, which have only one pair of parallel sides.

**ANSWER: Trapezoid** [RC]

6. One work by this artist features a winding river near Mt. Holyoke, and is titled “The Oxbow.” For 10 points each:

[10] Name this painter of “The Voyage of Life” and the “Course of the Empire” Series, which includes works titled *The Savage State and Desolation*.

**ANSWER: Thomas Cole**

[10] Thomas Cole founded this school of art named for a body of water, whose other adherents include Albert Bierstadt and Frederic Edwin Church.

**ANSWER: Hudson River School**

[10] The Hudson River School primarily focused on this genre of painting that focuses on natural scenes. Some subjects included Niagara Falls and the Sierra Nevada Mountains.

**ANSWER: Landscape** [RM]

7. This man wrote the failed tragedies *Sejanus His Fall*, *Mortimer His Fall*, and *Catiline His Conspiracy*. For Ten Points Each:

[10] Name this dramatist of *Epicoene, or the Silent Woman*. He insulted the less title-savvy in *The Poetaster*. Every character’s name is an animal, but in Italian, in his *Volpone*.

**ANSWER: Ben Jonson**

[10] Jonson asked Celia to “drink to me only with” these body parts in one poem. Shakespeare’s mistress’ versions of these organs are “nothing like the sun.”

**ANSWER: eyes**

[10] Jonson was so funny, some other people decided to get in on the joke and become his “sons,” such as this poet of “The Garden,” the Mower Poems, and “To His Coy Mistress.”

**ANSWER: Andrew Marvell** [CS]

**8.** Rocks in this class include obsidian and pumice. For 10 points each:

[10] Name these rocks formed through the cooling of magma or lava. They may be either intrusive or extrusive.

**ANSWER: Igneous** rock

[10] This extrusive igneous rock that makes up much of the oceanic crust. It is less than 20% quartz by volume, differentiating it from granite.

**ANSWER: Basalt**

[10] Basalt is formed by this process that occurs at mid-oceanic ridges and is responsible for continental drift.

**ANSWER: Seafloor Spreading** (prompt partial answer) [EF]

**9.** After this god raped Carna, he gave her power over hinges. For Ten Points Each:

[10] Name this two-faced father of Tiberinus. The doors of his temples were closed during peacetime and open during wartime since he was a door god.

**ANSWER: Janus**

[10] Janus was a god of these people. Priests of these people called the Salii leapt and carried a shield that was a gift from Mars.

**ANSWER: Romans**

[10] One of these Romans named Tarpeia tried to betray Rome to the Sabines before being crushed on thrown off her namesake rock. These people protected the sacred fire of Hestia’s Roman equivalent.

**ANSWER: Vestal Virgins** (or **priestess(es) of Vesta** or equivalents) [CS]

**10.** This artist recreated a circus using cloth, wire, and buttons. For 10 points each:

[10] Name this American sculptor, whose best known works include “Form against Yellow” and “Lobster Trap and Fish Tail.”

**ANSWER: Alexander Calder**

[10] Many of Calder’s sculptures were made in this signature color, which according to the title of one piece is “dominant.” Calder’s “Flamingo” was painted this color to contrast with a building in Chicago.

**ANSWER: Red**

[10] Calder originated this type of piece, which moved in response to air currents and were contrasted with his “stables.” “Lobster Trap and Fish Tail” is this type of piece.

**ANSWER: Mobiles** (prompt on **kinetic**) [PP]

**11.** He is known as the “Father of the Constitution.” For ten points each:

[10] Name this founding father who co-authored the *Federalist Papers* with Alexander Hamilton and John Jay. His presidency was marked by war with Britain in 1812.

**ANSWER: James Madison**

[10] In response to the Alien and Sedition Acts, James Madison and Thomas Jefferson wrote resolutions named for these *two* states. Jefferson’s argued that states have the right to “nullify” federal laws.

**ANSWER: Kentucky and Virginia** Resolutions (accept in either order)

[10] Jefferson’s support of nullification came back to bite him during his presidency, as New England states threatened to nullify this 1807 Act that Jefferson supported. The governments of Massachusetts and Connecticut passed resolutions declaring this trade law unconstitutional.

**ANSWER: Embargo** Act of 1807 [TB]

**12.** This man’s theories inspired John Hicks’ IS/LM Model. For Ten Points Each:

[10] Name this economist. He proposed the bancor as an international currency, and wrote *The General Theory of Money, Interest, and Employment*.

**ANSWER: John Maynard Keynes**

[10] Keynes’ *The Economic Consequences of the Peace* criticizes a treaty made after this war, calling it a “Carthaginian peace” that put way too high of reparations on Germany when negotiated at Versailles.

**ANSWER: World War I** (accept The **Great War**)

[10] Keynesian economics recommends governments do a lot of deficit spending to stimulate the economy, followed by a cycle of these things. Friedman wanted a negative income one to replace welfare.

**ANSWER: tax** [CS]

**13.** This man’s study of law at Arras earned him the nickname “The Incorruptible”. For 10 points each:

[10] Name this leader of the radical Jacobins during the French Revolution. He ushered in the Reign of Terror by executing thousands of suspected royalists.

**ANSWER: Maximilien Robespierre**

[10] This other Jacobin was notable for creating huge lists of suspected conspirators. He was assassinated in his bathtub by Charlotte Corday.

**ANSWER: Jean-Paul Marat**



[10] This government was formed after the collapse of the Reign of Terror. It was scrapped after Napoleon Bonaparte came to power.

**ANSWER:** French Directory (accept directoire) [HP]

**14.** In November 2016, this leader announced that she would run for a fourth term in 2017. For 10 points each:

[10] Name this leader who has been criticized for her open-door policy towards refugees. She succeeded Gerhard Schröder as Chancellor in 2005.

**ANSWER:** Angela Merkel

[10] Merkel is the leader of the Christian Democratic Union in this country, the site of terrorist attacks in Ansbach and Munich.

**ANSWER:** Federal Republic of Germany

[10] Angela Merkel announced her support for a nationwide ban of these articles of clothing, which cover the entire face and sometimes the whole body. France banned these religious articles of clothing in 2010.

**ANSWER:** Burqa or Burka (accept Niqab; do NOT accept “Hijab,” as it only covers the head, not the face) [PP]

**15.** Joseph Knecht [**CONNECT**] becomes Magister Ludi in this man’s *The Glass Bead Game*. For Ten Points Each:

[10] Name this author of *Narcissus and Goldmund* and *Beneath the Wheel*. Govinda reaches enlightenment after he kisses the title character’s forehead in this author’s *Siddhartha*.

**ANSWER:** Hermann Hesse

[10] Henry Haller’s visit to the “for madmen only” Magic Theater only costs “your mind” in this Hesse novel. Haller finds a “Treatise on the [title creature]” that describes his having a part-canine nature.

**ANSWER:** Der Steppenwolf

[10] Hesse was born in Germany and wrote in the language, but lived in this home country of Max Frisch. Johann David Wyss wrote about the shipwrecked Robinson family, who hailed from this country.

**ANSWER:** Switzerland (accept Swiss Family Robinson) [CS]

**16.** This group of elements generally form plus two ions. For 10 points each:

Name this group of elements that contains strontium, barium, and beryllium.

**ANSWER:** Alkaline Earth Metals (do not accept or prompt on “alkali metals”)

This alkaline earth metal is found in its namesake milk in the form of its hydroxide. Its atomic number is 12.

**ANSWER:** Magnesium (or Mg, accept milk of magnesia)

Magnesium is also found in Epsom salt, where it is bonded to this polyatomic ion. Adding two hydrogen ions to this polyatomic ion forms the acid that is mostly responsible for acid rain.

**ANSWER: sulfate** (accept **sulfuric acid**) [EF]

**17.** For 10 points each, answer some questions about the early history of Britain:

[10] This queen of the Iceni led a revolt against Roman rule in Britain. She sacked the city of Camulodunum **[Cah-MOOL-oh-DOO-NOOM]**, which is present-day London.

**ANSWER: Boudicca**

[10] Early 8th Century Britain was dominated by the rule of this people. Led at one point by King Guthrum, these people used a namesake law code to govern their lands.

**ANSWER: Danes** (accept **Danelaw**)

[10] This ruler defeated the Danes at the Battle of Edington. This ruler of Wessex became the first King of England, and is the only English king to be called “the great.”

**ANSWER: Alfred** the Great [HP]

**18.** Mikhail Berlioz’ MASSOLIT union ruins The Master’s literary career after he writes a book about this divine person. For Ten Points Each:

[10] After The Master tries to destroy that book, Woland tells him “manuscripts don’t burn.” The Grand Inquisitor imprisons this author of “The Parable of the Persistent Widow” in a Ivan Karamazov “poem.”

**ANSWER: Jesus** (the) **Christ** (or the **Messiah**, **Yeshu’a**, or **Joshua**, the **Son** of Man, the **Son** of God, or the **Word**; prompt on **God**, asking for a specific person of the Trinity) [*The Master and Margarita* is by Bulgakov; “The Grand Inquisitor” appears in *The Brothers Karamazov*]

[10] Jose Saramago, a native of this country, wrote the very heretical *The Gospel According to Jesus Christ*. Since its national epic includes myth, yet is still Christian, Chateaubriand praised its *Lusiads*.

**ANSWER: Portugal**

[10] *The Last Temptation of Christ*, by this country’s Nikos Kazantzakis, is also pretty heterodox. This country’s poets include Anacreon, Pindar, and Hesiod.

**ANSWER: Greece** (or **Hellas**) [CS]

**19.** The second movement of this work was rewritten into the hymn “Goin’ Home.” For Ten Points Each:

[10] Name this symphony premiered by Anton Seidl. It was largely based on the composer’s abandoned opera *The Song of Hiawatha*, and supposedly quotes “Swing Low, Sweet Chariot.”

**ANSWER: From the New World** (or, **The New World Symphony**; DO NOT REVEAL, but do accept **Dvorak’s Ninth Symphony**; prompt on “**Ninth Symphony**” alone)

[10] This composer of *Rusalka*, *The Water Goblin* and *The Bells of Zlonice* was Czech, but wrote the symphony *From the New World*.

**ANSWER: Antonin Dvorak [Duh-VOHR-"jacques"]**

[10] Both a string quartet named after this country and *From the New World* were written on Dvorak's trip to this country's city of Spillville.

**ANSWER: USA** (or **United States**; or **America**) [CS]

**20.** This tissue is covered with a sheath of connective tissue called the epimysium. For 10 points each:

[10] Name this type of tissue that comes in skeletal, cardiac, and smooth varieties. Its function is regulated by filaments of actin and myosin.

**ANSWER: Muscle**

[10] Sodium and potassium levels actuate rapid electrical membrane potential depolarization and repolarization in this process that occurs in neurons and muscle cells.

**ANSWER: Action Potential**

[10] This neurotransmitter is used at neuromuscular junctions and also plays a role in the peripheral and central nervous system.

**ANSWER: Acetylcholine [a-SEE-tal-ko-lean]** [RM]

**Tiebreaker:**

**21.** The Torres Del Paine National Park is located in this country, which is the longest in the world. For ten points each:

[10] Name this South American country which contains the ports of Valparaiso and Antofagasta and has a capital at Santiago.

**ANSWER: Chile**

[10] This Chilean desert's city of Yungay receives less than a millimeter of rain per year, and it is considered the driest non-polar desert in the world.

**ANSWER: Atacama Desert**

[10] The highest peak in Chile, Nevado Ojos del Salado, is situated in this circular area where a majority of the world's volcanic activity and earthquakes occur along the edges of the Pacific Ocean.

**ANSWER: Ring of Fire** [PP]