APC and AP Required Summer Reading

Look for your course below. If it is not listed, there is no summer reading. If you have questions contact your future teacher.

AP Capstone (Juniors and Seniors)

AP Capstone Seminar (Juniors and Seniors)

Students will receive a letter explaining the summer assignment. If you have not received the letter or if you have any questions about the assignment, please contact margarete.bermudez@ocps.net

APC and AP English

Ninth Grade APC English

Reading Assignment #1: Read Thomas C. Foster's *How to Read Literature Like a Professor: For Kids.*

Write a two-sentence summary for each chapter of *How to Read Literature Like a Professor: For Kids.* Type your responses using 11 or 12-point font (Calibri, Cambria, or Times New Roman). Double space your paper. Include the chapter number and title for each summary. Note: There is an “adult” version of this book that is longer and more detailed. We recommend that you buy the one labeled “for kids.”

Reading Assignment #2: Read *Lay That Trumpet in Our Hands* by Susan Carol McCarth.

As you read, you will need to complete a reader-response journal.

Reader-Response Journal Instructions:

- Title the top of the first page of your journal the name of your chosen novel. • Read the first 50 pages of the novel before starting your reader-response journal.
- Divide your paper into two columns by drawing a line down the middle of the page. Label the left side Passage and the right side Response.
- Passage side: Copy a meaningful passage from the book (dialogue, a description, or a character’s thoughts). Include the page number in the margin.
- Response side: Write your response to the passage – What does it mean to you? Why did you choose it? Did it puzzle or confuse you? Remind you of something? Where have you seen this character before? If you choose to comment on a personal experience, be sure to connect it to what is happening in the novel at that point.
- **Four** of your entries must reflect your application of *How to Read Literature Like a Professor: For Kids.* For example, one of the chapters in How to Read Literature explains how an author will use the weather as a plot device. A foggy setting could mean confusion and might suggest a character can’t see clearly. A passage from the book describing the weather should explain its significance to the plot or characters.
- Your journal for the novel should have at **ten** responses from throughout the book, so pace yourself. • These entries are **NOT** a summary or paraphrasing of your reading – it is a response to the passage.
A good, thoughtful, developed response should be at least five sentences. • Do not wait until you finish the novel to write your responses. The responses should reflect what you are thinking as you read the novel, not what you think when you are finished. Due Dates: Both assignments are due on the second day of class. Assessment: Evaluation of your summer reading will include a test on the second day of class, the same day that your assignments are due. This will be followed by other assignments and class discussions. Bring both books during the first few weeks of class. We will use How to Read Literature Like a Professor throughout the school year. Give yourself enough time to complete your summer reading. If you read the works early in the summer, please give them a quick review before school begins.
• Have a great summer! We look forward to meeting you in August.

JOURNAL RUBRIC

<table>
<thead>
<tr>
<th>Selection of Detail</th>
<th>Exceeds Expectations (10)</th>
<th>Meets Expectations (8)</th>
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<td></td>
<td>Selected passages are detailed, complex, and meaningful.</td>
<td>Selected passages are appropriate and meaningful.</td>
<td>Selected passages are minimal and analysis is superficial.</td>
<td>Selected passages are minimal and analysis is either an assortment of vague generalizations or shows no comprehension of the work.</td>
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<tr>
<th>Literary Elements</th>
<th>Includes in-depth discussion of literary elements and their contribution to purpose and meaning</th>
<th>Includes a discussion of literary elements; does not completely address how they contribute to meaning</th>
<th>Includes some identification of literary elements; has virtually no discussion of contribution to meaning</th>
<th>Includes few literary elements; has virtually no discussion of contribution to meaning</th>
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<tbody>
<tr>
<td>Commentary</td>
<td>Commentary provides thoughtful insight and connection to themes.</td>
<td>Commentary intelligently addresses thematic connections.</td>
<td>Commentary is vague and/or unsupported with little connection to theme.</td>
<td>Commentary involves paraphrase and/or plot summary.</td>
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| Interpretation/ Commentary | Fluent & direct expression. | Good demonstration of ideas and constructs. | Satisfactory writing style; however, there are some problems with organizational devices, such as paragraphs, sections, chapters, and transitions. There are several errors in grammar, punctuation, spelling, and/or capitalization. | Confusing & unclear, with poor writing style. Organizational devices, such as paragraphs, sections, chapters, and transitions, are flawed or lacking. Numerous errors in grammar, punctuation, spelling, and/or capitalization. |

| Clarity of Expression, Writing Style, Grammar & Punctuation | Fluent & direct expression. Organizational devices, such as paragraph sections, chapters, and transitions, have been used effectively. Great use of semantics & syntax. | Good demonstration of ideas and constructs. Organizational devices, such as paragraph sections, chapters, and transitions, have been used effectively. With minor exceptions, grammar, punctuation, spelling, and/or capitalization are correct. | Satisfactory writing style; however, there are some problems with organizational devices, such as paragraphs, sections, chapters, and transitions. There are several errors in grammar, punctuation, spelling, and/or capitalization. | Confusing & unclear, with poor writing style. Organizational devices, such as paragraphs, sections, chapters, and transitions, are flawed or lacking. Numerous errors in grammar, punctuation, spelling, and/or capitalization. |
**Tenth Grade APC English**

**Reading Task:**

Read Ella Minnow Pea by Mark Dunn and **chapters 1-4** of Thank You For Arguing, revised and updated paperback edition, by Jay Heinrichs

**Writing Task:**

Choose a major character in Ella Minnow Pea. Trace and analyze the development of their argument regarding the falling of the tiles and life on the island throughout the novel. Apply ideas discussed in chapters 1-4 of Thank You for Arguing. Consider the following topics:

- What is your chosen character’s central argument?
- Does their perspective change throughout the novel? How does this affect their argument?
- How could their argument be improved, based on the information contained in Thank You For Arguing?

Your response should be in the form of a well-developed and well-organized essay response. Your response should be between 500-1000 words and should include appropriately cited evidence from both texts. This assignment will be submitted via Turnitin.com during the first week of school. You will also be expected to participate in a class discussion on both texts, as well as your written response, during the first weeks of the school year.

**Eleventh AP Language and Composition**

Read *On Writing* by Stephen King. Although you are not required to annotate this book, we highly recommend that you take some sort of notes, as you will be tested on it the first week of school.

Read chapters 1-8 of *The Only Grammar Book You’ll Ever Need* by Susan Thurman. Be sure you understand the terms and concepts covered in these chapters. If you need additional help, many grammar sources are available on the internet, like [http://www.dailygram.com/](http://www.dailygram.com/)

We will review these chapters and quiz you on them during the first week of school.

If you have any questions please contact margarete.bermudez@ocps.net or michael.dutcher@ocps.net

**Twelfth AP English Literature**

The purpose of the summer reading assignment is complex:

- To help you build confidence and competence as readers of complex texts.
- To give you, when you enter the class in August, an immediate basis for discussion of literature.
- To set up a basis for comparison with other works we will read during the year.
- To provide you with the beginnings of a repertoire of works you can write about on the AP Literature exam next year.
- Last, but not least, to enrich your mind and stimulate your imagination.

Each student must read ONE of the following two required novels:
In addition to reading one of the novels above, you are expected to complete the four journal topics on your self-selected novel. Make sure to quote the text to show how the lines you choose support your points (cite page numbers).

**Brave New World** (Aldous Huxley):

1. Of all the methods and devices the World State uses to control its citizens, which do you find the most morally objectionable? Explain your reasoning.
2. Huxley makes use of several significant foils in *Brave New World*: Watson/Bernard, Bernard/John, Lenina/Linda, Lenina/Bernard. What is Huxley’s purpose for developing these contrasts?
3. Different characters in the novel fight power in different ways (Bernard, Helmholtz, John). Are any of these effective? What is the best way to fight the system in this novel? Explain your reasoning.
4. When John first starts reading Shakespeare, he discovers the word make his emotions “more real.” Discuss the power of language in the novel, the power of the word to influence thought and behavior. Why did Huxley choose Shakespeare as a medium for John’s intellectual awakening?
5. Explore the development of one of the following motifs in *Brave New World*: free will versus enslavement, class conflict, science and technology, knowledge versus ignorance, denial of death, materialism, self and society, or God and religion.

**Oryx and Crake** (Margaret Atwood):

1. Explore the focus on different types of evolution, natural and synthetic specifically, throughout the novel.
2. Explore the symbols throughout the novel, consider BlyssPluss, Paradise, the Pleeblands, extinctathon, etc.
3. Explore how Atwood uses names throughout the novel. Explore what pivotal role (if not multiple roles) names play. How do names relate to/demonstrate the power dynamic and differences in social class?
4. Explore the relationship between characters, consider Jimmy and his family, Jimmy and Oryx, Jimmy and Crake, Oryx and Crake, etc.
5. Explore the structure and genre of the novel. How does it fit the dystopian genre? Break it? How does Atwood alter the traditional narrative style?

**JOURNAL RUBRIC**

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<td>Interpretation/Commentary</td>
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<td>Clarity of Expression, Writing Style, Grammar &amp; Punctuation</td>
<td>Fluent &amp; direct expression. Organizational devices, such as paragraph sections, chapters, and transitions, have been used effectively.</td>
<td>Good demonstration of ideas and constructs. Organizational devices, such as paragraph sections, chapters, and transitions, have been used effectively.</td>
<td>Satisfactory writing style; however, there are some problems with organizational devices, such as paragraphs, sections, chapters, and transitions.</td>
<td>Confusing &amp; unclear, with poor writing style. Organizational devices, such as paragraphs, sections, chapters, and transitions, are flawed or lacking.</td>
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Great use of semantics & syntax. | With minor exceptions, grammar, punctuation, spelling, and/or capitalization are correct. | There are several errors in grammar, punctuation, spelling, and/or capitalization. | Numerous errors in grammar, punctuation, spelling, and/or capitalization. 

You will also complete the following module.

Module Directions:

In addition to reading one of the required novels, you also need to complete the module below.

Remember:

- We always prefer you type your assignments.
- Please be sure that your ideas and your work are solely your own.
- You should be prepared to hand in these assignments and discuss the works you read on the first day of school.

The Classic Drama Module:

A. Select and read one of the following classic plays:

- Death of a Salesman by Arthur Miller
- A Doll's House by Henrik Ibsen
- A Raisin in the Sun by Lorraine Hansberry
- A Midsummer Night's Dream by William Shakespeare

B. Each of the above novels has been paired with a well-known ancillary poem; complete the writing assignment:

Death of a Salesman: Dylan Thomas (1914-1953) remains one of the legendary figures in 20th-Century poetry, both for the impact of his visionary, musical verse, and for the notoriety of his private life. Dylan Thomas' detractors accuse him of being drunk on language as well as whiskey, but while there's no doubt the sound of language is central to his style, he was also a disciplined writer who re-drafted obsessively. Read "Do Not Go Gentle into that Good Night" and consider the parallels between the play and the poem as a whole. Consider characterization, imagery, symbolism, theme or a combination of these. Your thesis will need to do more than just state the obvious comparisons/contrasts. It should tell me the significance of the comparison.

A Doll's House: Among all women poets of the English-speaking world in the nineteenth century, none was held in higher critical esteem or was more admired for the independence and courage of her vies than Elizabeth Barrett Browning. Browning's work had a major influence on prominent writers of the day, including the American poets Edgar Allan Poe and Emily Dickinson. Read "Sonnet 1 (Grief)" and consider the parallels between the play and the poem as a whole. Consider characterization, imagery, symbolism, theme or a combination of these. Your thesis will need to do more than just state the obvious comparisons/contrasts. It should tell me the significance of the comparison.

A Raisin in the Sun: A poet, novelist, fiction writer, and playwright, Langston Hughes is recognized as an important literary figure during the 1920s, a period known as the "Harlem Renaissance" because of the number of emerging black writers. Read "Harlem" (sometimes referred to as "A Dream Deferred") and consider the parallels between the play and the poem as a whole. Consider characterization, imagery, symbolism, theme, or a combination of these. Your thesis will need to do more than just state the obvious comparisons/contrasts. It should tell me the significance of the comparison.

A Midsummer Night's Dream: Robert Browning was a major English poet of the Victorian age. He is noted for his mastery of dramatic monologue and psychological portraiture. Read "Porphyria's Lover" and consider the parallels between the play and
the poem as a whole. Consider characterization, imagery, symbolism, theme or a combination of these. Your thesis will need to do more than just state the obvious comparisons/contrasts. It should tell me the significance of the comparison.

### ESSAY RUBRIC

<table>
<thead>
<tr>
<th>Score</th>
<th>Point Value (50)</th>
<th>Criteria for Score</th>
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<tbody>
<tr>
<td>9</td>
<td>50</td>
<td>Excellent, specific thesis; excellent illustrations/specific, detailed support; excellent organization; sound mechanics; effective imagination, sees and makes connections; no major grammatical errors.</td>
</tr>
<tr>
<td>8</td>
<td>48</td>
<td>Excellent, specific thesis; excellent illustrations/specific, detailed support; efficient organization; less imagination or speculation; a few mechanical flaws which do not reduce the impact of the analysis; no more than one instance of major grammatical errors.</td>
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<tr>
<td>7</td>
<td>45</td>
<td>Intelligent, yet less concise thesis; effective illustrations; sound organization; adequate mechanics; a &quot;safe&quot; paper, beautifully done; no more than two instances of major grammatical errors.</td>
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<tr>
<td>6</td>
<td>43</td>
<td>Good, safe thesis, completely adequate in every way; some illustrations; a beginning, middle, and end; significantly less imagination; no more than three instances of major grammatical errors.</td>
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<tr>
<td>5</td>
<td>40</td>
<td>The thesis is adequate, yet unnecessarily general; predictable illustrations; general analysis; a few definite mechanical flaws; intelligent observations and conclusions; contains minor errors in comprehension of work (mistaken character or place names, et cetera); no more than three instances of major grammatical errors.</td>
</tr>
<tr>
<td>4</td>
<td>38</td>
<td>The thesis is too broad or too vague; some illustrations, but surface analysis or plot summary; definite mechanical flaws or carelessness; the write has &quot;moments&quot; when it's an essay as opposed to a plot summary or other form; shows major problems with comprehension of work; no more than four instances of major grammatical errors; use of 2nd or 1st person.</td>
</tr>
<tr>
<td>3</td>
<td>35</td>
<td>An adequate report; the thesis is too broad or too vague; an intelligent summary; few illustrations; punctuation flaws; might reflect a simple lack of effort or a hurried, last-minute preparation; four or more instances of major grammatical errors; use of 2nd or 1st person.</td>
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<tr>
<td>2</td>
<td>32</td>
<td>The thesis, if it exists, is hiding; it is up to the reader to find it; assortment of rambling generalizations; amidst all the generalization, there are enough intelligent observations to justify a passing grade; many grammatical errors.</td>
</tr>
<tr>
<td>1</td>
<td>25</td>
<td>Lack of effort; no thesis, therefore nothing to illustrate; no interest in topic; usually rather brief and underdeveloped; completely off-topic; shows no comprehension of work; contains egregious grammatical errors.</td>
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If you have any questions or need additional information, please email Ms. Eskin (elizabeth.eskin@ocps.net), Mr. Brosseau (trevor.brosseau@ocps.net), or Mrs. Kee (michelle.kee@ocps.net). Do not hesitate to contact us, but ONLY about AP Literature—no other curriculum issues.

### AP Science

**AP Chemistry**

Summer Assignment Due the first week of school. In the AP Chemistry book that you can check out of the TCHS library. Please complete the problems at the end of each chapter Ch1. *Dimensional Analysis* 35,37,41,46,55,59,73,80 Ch2. *Periodic table and Naming compounds* 41,43,45,49,59-72 Ch3. *Chemical stoichiometry* 18,27-31,35,37,39,41,43,47,49,53,63,66,69,73,77,87,89,91,93,95,97,114 In the Study Guide Ch2 Pg. 40 #20,23 Pg. 41 #31,32 Ch3 Pg. 71 #43,45 Pg. 73 #58,61,62,64 Pg. 74 #70,71,72 *Memorize the Common Polyatomic Ions* Pg. 67 table 2.5 You will be quizzed the first week of school. ****this website offers lots of free videos on all Chemistry topics****

https://socratic.org/chemistry
AP Social Studies

Prepare for Acceleration Workshop (PAWS) Seminar/AP Comparative Government and Politics

The first half of that year is called "PAWS," and the summer assignment is to read E.H. Gombrich's *A Little History of the World* over the summer. Assignment sheets are available in the TCHS library. These books are available at Barnes and Noble and other book stores. If there is a problem or you have questions email Mr. Tesch at marius.tesch@ocps.net

AP European History

Read *A World Lit by Fire* by William Manchester. You will have a test when you return to school. Students should try to understand the themes presented in the book and the arguments that the author gives. Please don’t try to memorize numerous details.

Contact Phillips at Phillic@ocps.net if you have any questions

AP Human Geography

1. **Part 1:** Read the two articles by Charles F. Gritzner. You should read “Why Geography?” first. Then read, “Defining Geography: What is where? Why there? Why care?” After reading both articles, you are to write a 500 word (approximately two typed pages) reflective essay comparing and contrasting the two articles. You must address the two essential questions listed below in your essay in your own words. (Do not quote excessively from the articles.) **You must support the essay with information from the article to receive credit.**

   1. What is Geography and why do you feel it is important?
   2. Why is Geography not a prevalent subject taught in most schools? Should this be changed? Why/Why not?

2. **Part 2:** The Five Themes of Geography. Research an article for each of the 5 themes of geography (listed below). You may use any reputable news source either in print or online. Your sources should be cited in MLA format at the top of each review. For each article summarize the main points and then describe how the information relates to the given theme (250 words minimum for each article). You may use the following link for background information on the 5 themes. [World Atlas 5 Themes](#)

   1. Location
   2. Place
   3. Human-Environment Interaction
   4. Movement
5. Region

Additional Support:
1. Why Geography - https://goo.gl/6W5bmP
2. Defining Geography - https://goo.gl/H8VqDF
3. 5 Themes - https://goo.gl/Xfa84V

AP Articulation:
*Enduring Understanding*

A. Geography, as a field of inquiry, looks at the world from a spatial perspective.

### Part 1 Rubric

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<th>5 points</th>
<th>3 points</th>
<th>1 points</th>
<th>25 Total Points</th>
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<tr>
<td><strong>Originality &amp; articulation of thought</strong></td>
<td>Writing depicts a full understanding of the material and includes the student’s own thoughts supported by the reading.</td>
<td>Writing depicts limited understanding of the material and/or includes limited student thoughts supported somewhat by the reading.</td>
<td>Very little understanding is made evident by the paper and/or there may be little or no direct references to the reading.</td>
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<tr>
<td><strong>Questions thoroughly addressed</strong></td>
<td>Both questions have been answered in their entirety with proper references to the reading.</td>
<td>Both questions have been mostly addressed with at least some references to the reading.</td>
<td>One or more questions have not been fully addressed and/or little to no references to the reading.</td>
<td></td>
</tr>
<tr>
<td><strong>Why Geography</strong></td>
<td>A thorough understanding of the reading is made apparent.</td>
<td>A moderate understanding of the reading is made apparent.</td>
<td>A limited understanding of the reading is made apparent.</td>
<td></td>
</tr>
<tr>
<td><strong>Defining Geography</strong></td>
<td>A thorough understanding of the reading is made apparent.</td>
<td>A moderate understanding of the reading is made apparent.</td>
<td>A limited understanding of the reading is made apparent.</td>
<td></td>
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<tr>
<td><strong>Word Count</strong></td>
<td>500+</td>
<td>300-500</td>
<td>100-300</td>
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### Part 2 Rubric

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<th>5</th>
<th>3</th>
<th>1</th>
<th>25 Total Points</th>
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<tbody>
<tr>
<td><strong>Topic Selection</strong></td>
<td>Articles chosen related directly to the topic.</td>
<td>Articles chosen relate somewhat to the topic.</td>
<td>Articles chosen have limited relation to the topic.</td>
<td></td>
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AP World History Summer Assignment

In AP World History class next year you will be expected to read a series of historical texts that discuss and explore a variety of topics throughout history. The books that will be assigned to the class are designed to introduce students to major topics and themes of World History. There will be one text assigned each nine weeks and you will be required to write a critique of these texts in paper form. The major questions these texts will attempt to answer could include: what were the causes and effects of an event? What were the reasons for major changes and continuities within a region? How did this period of history affect the modern day world? What is the significance of two civilizations interacting with each other? In these texts students will be introduced to historiography which focuses on how events in history are interpreted and perceived by historians. The purpose of historiography is to illustrate that there are multiple points of view on historical events and that historians must evaluate sources, in particular primary sources, with a variety of criteria including the author’s background, position in society, what they wanted to see happen, and their purpose for creating the document. You will learn that historians don’t agree on how history is interpreted and it will be your job to identify strengths and weaknesses of historical authors and their arguments. As part of the AP World History curriculum you are then expected to read, analyze, critique, and discuss the arguments of these historians and how they interpret historical events and the people who participated in them. The reason we will do this in class is to better understand documents in a historical context, develop historical thinking, be able to evaluate the validity of information in our modern world, improve analytical writing skills, and understand our past and the contributions it has made to the world we live in today. Upon completion of these various texts, you will then be expected to write a detailed response to a series of questions on each of the texts in paper form.

During the summer you will be assigned one historical texts which will be used to introduce students to the AP World History curriculum. The following text is required for your summer reading:

1) A History of the World in Six Glasses by Tom Standage

The assignment for A History of the World in Six Glasses will be a paper that you will turn in your first day back to school in August. The paper guidelines will follow this introduction to the summer assignment. Thank you and have a great summer.
For more info contact Mr. Stano or Mr. Prater jason.stano@ocps.net and prater.joseph@ocps.net

AP World History Summer Assignment – A History of the World in Six Glasses Book Review

One role of the historian in our world today is to evaluate texts and analyze the major themes and ideas of an author. By identifying strengths and weaknesses of texts, historians can build their knowledge of a historical period, therefore gaining a better understanding of that topic. In class this year we will be doing the same thing. Many of you do not have much experience evaluating historical texts, and this may be the first time you have been assigned to critically review a book/text. In A History of the World in Six Glasses author Tom Standage takes a unique look at history through the study of the role that beverages played in the development of cultures and societies. Standage reviews how beverages played a role in social status, helped fuel trading routes, helped to define cultures, and even became international symbols of the world’s superpowers. You are to critically analyze A History of the World in Six Glasses in a paper format. Your paper will be 5-6 pages in length and you will incorporate 3-6 footnotes into your response.

You are to utilize the following questions to help guide your paper. DO NOT address all of these questions in your paper, just focus on a few. Your paper needs to be a balance of reviewing the content of the text and Standage’s writing; strengths/weaknesses, writing style, etc.

- What is Standage’s thesis? What is his argument? What are his supporting evidence?
- How did the development of beer in Mesopotamian & Egyptian society contribute to the social structure development in these regions, in particular the priestly class?
- How did the Greeks transform wine into the drink of advanced civilizations?
- How did the development of Christianity help maintain the wine drinking culture of Europe?
- How did Islam in the M. East contribute to the decline of wine & the rise of coffee consumption.
- In what way did spirits help fuel the slave trade and why did rum become the world’s first global drink?
- Do you agree with Standage that coffeehouses of the 17th & 18th centuries are like the internet of today? Explain your answer.
- Standage argues that tea is the story of imperialism, industry, & domination of the globe. What does he mean?
- What enabled Coca-Cola to become the international drink that it has become today?
- What role does Coca-Cola play in the globalized economy of today?
- What did you learn from this text? What were the book’s strengths? – weaknesses?
- Did you enjoy the text? Why or Why not?

Paper Guidelines:
- MLA Format
- 5-6 pages in length
- Times New Roman font
- 12 font size
- Double-Spaced - 1 inch margins
- 3 footnotes – MLA Format – I know you don’t have much experience but do your best
- The paper should have an introduction, body paragraphs and conclusion
- I DO NOT want a summary of the book – you need to analyze Standage’s work and thesis
- Bibliography (I know it is only one book, but it will be good to practice for the upcoming year)
AP US History Summer Assignment

Dear future APUSH (Advanced Placement United States History) students:

Collegeboard, the creators of the AP exam, is bringing the course in line with increased rigor of the Florida Standards for Social Studies. In order to be successful in this course a student must be a proficient reader of historical texts, both primary and secondary, must be able to think analytically, and write with clarity & purpose to historical questions. As a result the course will be very heavy in reading of historical texts, understanding ‘schools of history’, learning the history of America, and expressing analytical thought in written form. To achieve those goals, the course will have many writing processes and assignments to foster and support that understanding. Students will be required to develop historical arguments for debate, discussion, as well as written presentation. **Therefore, many assessments will be based upon student created work (essays, document analysis, diagrams that demonstrate student understanding).**

**So now that you know this, what can you do?** I implore you to invest some of your time this summer familiarizing yourself with American History. If you choose to do nothing in preparation for this course, you will start from a stand still while others who have chosen to be proactive learners will ‘hit the ground running’.

There are **7 Themes** that will guide our studies (commas separate them): American and National Identity, Politics and Power, Work Exchange and Technology, Culture and Society, Migration and Settlements, Environment and Geography, America in World Keep these themes in mind while investigating America and how these concepts interact to create America. Keep these 7 Themes in mind while exploring American history.

1. **Look at the Collegeboard website:**


   This page gives you a brief overview of the course. MORE IMPORTANTLY, scroll to the bottom and download the .pdf. (Or click on link below). This 142 page .pdf shows the entire course and exam description. **Make sure you understand what this course requires and that YOU are willing to invest the time, energy, and thought to be successful.**


2. **Spend some time investigating U.S. history. Some great websites to check out:**


   Youtube.com  -- look for crash course US history videos and others by a guy named John Green.


   [http://www.nhd.org/USHistoryPrimarySources.html](http://www.nhd.org/USHistoryPrimarySources.html)  -- Various links to sources and other sites.

**If you wish to get ahead before the school year starts, see below.**

**The 1st few assignments/assessments:**

1) There will be quizzes regarding geography this year. You will need at least the following:
   a. You will need to be able to locate on a map: Locate all 50 states, **Bodies of Water:** Chesapeake Bay, Potomac River, Hudson River, Lake Erie, Lake Huron, Lake Michigan, Lake Ontario, Lake Superior, Ohio River, Mississippi River, Tennessee River, Colorado River, Columbia River, Great Salt Lake, Missouri River, Nueces River, Rio Grande, Willamette River, Yukon River. **Mountains/Regions:** Appalachian Mountains, Black Hills, Cascade Mountains, Great Plains, Rocky Mountains, Sierra Nevada Mountains

2) We will be using a book called Amsco. You will get a physical copy from the media center when school begins but here is an internet link to use: [http://ma.lvlhs.org/ourpages/auto/2012/4/12/58446259/TOP%20REVIEW%20TEXTBOOK.pdf](http://ma.lvlhs.org/ourpages/auto/2012/4/12/58446259/TOP%20REVIEW%20TEXTBOOK.pdf)

If you have any questions over the summer, you can email me at adam.lange@ocps.net or the other APUSH teacher Robin.Silverglate@ocps.net. We will be checking our email **ON A LIMITED BASIS** over the summer, but we will respond to you.

Below will be one of the 1st assignments due the 1st week of school. You should respond to these questions using complete sentences. Assignment must be hand written.

John Greene Crash Course Videos Chapter 1 & 2 Guided Questions. These videos can be found on youtube.com.

**The Black Legend, Native Americans, and Spaniards: Crash Course US History #1**

When the Europeans made contact with North American, what didn’t and did Native Americans have?

What are some differences and similarities among Native Americans in North America?

Describe Pope and the causes of the Pueblo revolt as well as the results/consequences of the revolt.

Contrast Sepulveda’s and Bartolome de Las Casas’ view of Native Americans.

**When is Thanksgiving? Colonizing America: Crash Course US History #2**

Describe the difficulties encountered with the Jamestown settlement AND the solutions.

1. What impact did tobacco have on Jamestown and in England both economically and socially?
2. What problem did the Pilgrims and Puritans have with the Church of England & describe the Puritan religion
3. What was the Mayflower Compact AND why was it a big deal?
4. How was the Massachusetts Bay Company similar to and different from Jamestown?
5. What did Winthrop mean by “City Upon a Hill” and what is the significance of this document in our history?

AP Spanish Literature

AP Spanish Literature

AP Literatura y Cultura Hispanoamericana

Sra. Gioconda Pérez: gioconda.perez@ocps.net

Año escolar 2017-2018

Apreciado estudiante,

Has tomado la decisión de continuar con tus estudios en el idioma español, ¡Bienvenido! Me alegra que hayas elegido nuestro curso de literatura y cultura. Este es un curso de tercer año de la universidad, el cual contempla el estudio de obras muy interesantes, de autores reconocidos internacionalmente por su excelencia como escritores. Me ofrezco para acompañarte en un viaje maravilloso por la tierra hispanoamericana, su historia y sus costumbres a través de su literatura. Creo que lo vas a disfrutar.

Por otra parte, si sigues las normas del curso y te dispones a aprovecharlo con interés, progresarás mucho con el idioma y aprobarás el examen de AP al final del año escolar. Para lograr estos objetivos, tendrás que realizar los trabajos de clase y las tareas que te ayudarán a practicar tu lectura, escritura, comprensión oral y escrita del idioma castellano.

El curso proporciona una visión panorámica de la literatura española e hispanoamericana. Leeremos obras de cada género literario: novelas, cuentos cortos, ensayos, poesía y teatro. A través del análisis de las obras, recorreremos la historia de la literatura, analizaremos los elementos contenidos en las lecturas, y veremos cómo éstos están relacionados entre sí. El curso contiene una variedad de temas académicos y culturales desarrollados totalmente en español.

Si tienes dudas o comentarios, puedes comunicarte conmigo a través de mi correo electrónico. No dejes que el trabajo te impresione, tendrás mi apoyo cada vez que lo necesites, eso sí, te pido poner todo tu esfuerzo para que puedas aprovechar esta gran oportunidad. Felicitaciones por tu valentía y deseos de superación, y te aseguro un año lleno de retos y satisfacciones.

Sra. Pérez
Maestra

Tarea de verano

De acuerdo a la política de la escuela, todo trabajo deberá ser entregado a su fecha de vencimiento. La fecha de vencimiento de esta tarea es el lunes 21 de agosto.

1. **Introducción a los géneros literarios.** Escribe una definición de los siguientes términos literarios y da algunos ejemplos de cada uno. Presentación: Power Point, Prezzi, Google slides, Poster o video, para que lo expongas a la clase.
   a. Novela
b. Cuento  
c. Teatro  
d. Poesía  
e. Ensayo  
2. **Cronología de la literatura española.** Define las épocas de la literatura española* y explica sus principales características**. Presentación: Power Point, Prezzi, Poster o video para exponerlo a la clase.  
* Las Épocas de la literatura española que debes incluir son:  
  a. La Época Medieval o Edad Media  
  b. El Renacimiento  
  c. El Barroco  
  d. El Neoclasicismo  
  e. El Romanticismo  
  f. El Naturalismo  
  g. El Modernismo  
  h. La generación del 98  
  i. El Vanguardismo  
  j. El Boom Latinoamericano  
  k. La Literatura Femenina Contemporánea.  
** Las principales características de cada época son:  
  a. Nombre de la época Literaria  
  b. Siglos y años en los cuales se desarrolló  
  c. Principales acontecimientos históricos y culturales de ese momento  
  d. Corrientes literarias de moda en esa época  
  e. Autores más destacados y el título de sus principales obras literarias.  

**Recursos:**  
- Libro de texto: Abriendo Puertas, ampliando perspectivas de Bowen y Bowe  
- Internet. Usa fuentes confiables.  

**NOTA:** Envía todo a mi email, no es necesario imprimirlo: gioconda.perez@ocps.net. También guárdalo en una memoria y tráelo a la clase.  

**APC, Honors and Regular Algebra II**  

**APC Algebra II** (Summer assignment is due during the first week of school.)  

**Honors Algebra II** (Same assignment is recommended but not mandatory for students. The goal is to help students keep up with the algebra material over the summer months.)  

**Part A Systems of Equations**  

Solve the system of equations:
\[
\begin{align*}
\begin{cases}
x + y &= 7 \\
x - y &= 10
\end{cases}
\end{align*}
\]
\[
\begin{align*}
\begin{cases}
4x - 10y &= -3 \\
12x + 5y &= 12
\end{cases}
\end{align*}
\]
Solve using the substitution method:
\[
\begin{align*}
\begin{cases}
y &= \frac{-1}{3}x + 2 \\
3x - 2y &= 10
\end{cases}
\end{align*}
\]
A local cell phone company offers two different calling plans. In the first plan, you pay a monthly fee of $30 and $0.35 per minute. In the second plan you pay a monthly fee of $99 and $0.05 per minute.

a. Write a system of equations showing the two calling plans.
b. When is it better to use the first calling plan?
c. When is it better to use the second calling plan?
d. How much does it cost when the calling plans are equal?

Part B  (No Calculator allowed on this section)
1. Samantha drove her car for 15 miles at a certain speed $s$ to get to her first destination. She then drove 3 miles less and 10 miles per hour faster to get to her second destination. Which expression below models the combined time Samantha spent driving?

$$\frac{15}{s} + \frac{12}{s+10}$$

- **A** $\frac{15}{s} + \frac{12}{s}$
- **B** $\frac{15}{s+10} + \frac{12}{s}$
- **C** $\frac{15}{s} - \frac{12}{s+10}$
- **D** $\frac{s}{s+10} + \frac{12}{15}$

2. Write the radical expression in rational exponent form.

$$\sqrt[3]{k^7}$$

- **A** $k^3$
- **B** $k^7$
- **C** $k^4$
- **D** $k^{10}$

3. Which of the following is equal to $\sqrt[5]{(j^{-3})^2}$? Assume that $j$ is positive.

- **A** $j^{-\frac{2}{5}}$
- **B** $j^{\frac{1}{3}}$
- **C** $j^2$
- **D** $j^{\frac{2}{3}}$

4. Which of the following are equal to $\sqrt[5]{(p^{-3})^2}$? Assume that $p$ is positive.

- **A** $\sqrt[5]{p^{-6}}$
- **B** $\sqrt[5]{p^{15}}$
- **C** $\frac{1}{p^{30}}$
- **D** $\sqrt[10]{p^{-13}}$
- **E** $\frac{1}{p\sqrt{p}}$
- **F** $\frac{1}{\sqrt[5]{p}}$

Match each radical expression with its equivalent rational exponent expression. Assume that $w$ is nonnegative.

<table>
<thead>
<tr>
<th>Expression</th>
<th>Equivalent Exponent</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\sqrt[5]{w^5}$</td>
<td><strong>A</strong> $w^3$</td>
</tr>
<tr>
<td>$\sqrt[5]{w^3}$</td>
<td><strong>B</strong> $w^5$</td>
</tr>
<tr>
<td>$\sqrt[5]{w^5}$</td>
<td><strong>C</strong> $w^3$</td>
</tr>
<tr>
<td>$\sqrt[5]{w^5}$</td>
<td><strong>D</strong> $w^3$</td>
</tr>
<tr>
<td>$\sqrt[5]{w}$</td>
<td><strong>E</strong> $w^5$</td>
</tr>
<tr>
<td>$\sqrt[5]{w}$</td>
<td><strong>F</strong> $w^3$</td>
</tr>
<tr>
<td>$\sqrt[5]{w}$</td>
<td><strong>G</strong> $w^2$</td>
</tr>
<tr>
<td>$\sqrt[5]{w}$</td>
<td><strong>H</strong> $w^2$</td>
</tr>
</tbody>
</table>
9. Write the four expressions in descending order of resulting exponent when written in simplified rational exponent form. Assume $t$ is positive.

\[
\sqrt[3]{t} \cdot \sqrt[5]{t} \quad \frac{t^4}{t^5} \quad \left(\sqrt[5]{t^2}\right)^4 \quad \frac{1}{t^{\frac{2}{5}}}.
\]

10. In line four of the problem, the right side of the equation is $x^{\frac{1}{3}}$ divided by $\frac{2}{5}$. 
On a recent exam, Terrell was asked to simplify \( \frac{x^3}{x^5} \), assuming that \( x \) is not zero. His work is shown below.

\[
\begin{align*}
\frac{x^3}{x^5} &= x^{3-5} \\
&= x^{-2} \\
&= \frac{1}{x^2}
\end{align*}
\]

a. What mistake did Terrell make?

b. Find the correct answer. Show your work.
SELECTED RESPONSE
Select the correct answer.

1. What does the imaginary number \( i \) represent?
   A  \(-1\)
   B  \(\sqrt{1}\)
   C  \(\sqrt{-1}\)
   D  \(-\sqrt{-1}\)

2. Which of the following is equivalent to \(\sqrt{-121}\)?
   A  11
   B  -11
   C  11i
   D  121i

Select all correct answers.

3. Find all solutions of the equation \(x^2 = -484\).
   A  \(x = 22\)
   B  \(x = -22\)
   C  \(x = 22i\)
   D  \(x = -22i\)

Match each number with its equivalent form.

4. \(-\sqrt{5}\)  A  \(-8\)
   B  \(-2\)
   C  \(-2\sqrt{2}\)

5. \(\sqrt{-8}\)  D  \(-20\sqrt{2}\)
   E  \(-2i\)

6. \(\sqrt{-8}\)  F  \(8i\)
   G  \(2i\sqrt{2}\)

7. \(\sqrt{-8}\)  H  \(20i\sqrt{2}\)

CONSTRUCTED RESPONSE

9. How many real solutions does the equation \(x^4 - 16 = 0\) have? How many non-real solutions? State all solution(s) of the equation.

10. Simplify each expression and tell whether it represents a real number or a non-real number.
    a. \(\sqrt{144} - \sqrt{64}\)
    b. \(\sqrt{144} + \sqrt{-64}\)

11. How many real solutions and how many non-real solutions does the equation \(x^2 + 5 = 0\) have? Describe what implications your answer has for graphing the function \(y = x^2 + 5\).

12. Why is it imprecise to say that the equation \(25x^2 + 27 = 0\) has no solution? Find all solutions of the equation.
Go to Desmos.com and roughly sketch the following equations:

(If you need help graphing on Desmos.com, go on youtube.com and watch a desmos video)

1) \( r(x) = \frac{1}{4}x + 6 \)

2) \(-2x+3y = 16\)

3) \( y = x^2 \)

4) \( g(x) = x^2 - 4 \)

5) \( h(x) = (x - 4)^2 \)

6) \( t(x) = -x^2 \)

7) \( f(x) = x^3 - 4 \)

8) \( z(x) = (x - 4)^3 \)

9) \( y = x^3 \)

Part D (continued)
10) \( y = x^2 + 2x - 4 \)  
11) \( q(x) = x^3 + 2x - 4 \)  
12) \( q(x) = -x^3 - 2x + 4 \)  
13) \( y = \frac{2}{x} \)  
14) \( y = \frac{-2}{x} \)  
15) \( b(x) = x^4 - x^3 - 2x^2 - 12 \)  
13) \( j(x) = \log_{10} x \)  
14) \( p(x) = (\log_{10} x) + 2 \)  
15) \( p(x) = \log_{10} (x - 2) \)  
16) \( y = 3(2)^x \)  
17) \( y = 2(3)^x \)  
18) \( y = e^x \)  

Part E  No Calculators are allowed on this section
Solve the equation for the unknown variable:

1) \(-\frac{1}{2}x + 5 = -32\)  
2) \(3(y + 3) + 5y = 4(2y + 1) + 5\)

Solve for w:  
3) \(A = lw + wh + lh\)

Solve for y:  
4) \(a(y + c) = b(y - c)\)

Solve for x: (if you need help with number 5, google search absolute value equations)

5) \(|2x - 3| = 6\)  
6) \(0 = (x - 3)^2 - 9\)  
7) \(3x^2 - 6x - 9 = 0\)

Solve for y:

8) \(y = \frac{1}{4}(0 - 4)^2 + 25\)  
9) \(x^2 - x - 6 = 0\)

In 9-11, solve for x: (Use Factoring or the Quadratic formula)

10) \(x^2 - 13x + 36 = 0\)  
11) \(3x^2 - 6x - 9 = 0\)

12) Solve the quadratic (Find the zeros): 

\(x^2 - 6x - 27 = 0\)

13) Solve for x: 

\(\frac{2x}{3} = 16\)

14)
Consider the equation

\[ 7x^2 - 2x + 9 = 2x^2 - 5x + 8. \]

a. Rewrite the equation in the form

\[ ax^2 + bx + c = 0. \]

b. Describe the solution(s) of the equation as real or non-real.

c. Solve the equation over the set of complex numbers.

15)

Match each equation with its solutions over the set of complex numbers.

\[ x^2 + 4 = 0 \]
\[ x^2 - 4 = 0 \]
\[ x^2 + 4x + 12 = 0 \]
\[ x^2 - 4x + 8 = 0 \]

A \[ x = \pm 2 \]
B \[ x = \pm 2i \]
C \[ x = 2 \pm 2i \]
D \[ x = -2 \pm 2i \]
E \[ x = 2 \pm 2i\sqrt{2} \]
F \[ x = -2 \pm 2i\sqrt{2} \]
1) A standard deck of cards has 52 cards with 4 suites (hearts, diamonds, clubs and spades). Find the given probabilities:
   a) Find the probability of picking a heart from a standard deck of cards
      a) __________
   b) Find the probability of picking a spade from a standard deck of cards
      b) __________
   c) Given the fact that you pull a heart from a deck of cards, what is the probability you choose a 2?
      c) __________
   d) Given the fact that you pull a Queen from a deck of cards, what is the probability you choose a red card?
      d) __________

A die is rolled twice. Find each probability.

e) P(2, followed by a 3)
f) P (1., then any number)

**Part G Factoring**

1) Factoring problems (No Calculator)

Factor:

a) $x^2 + 2x$  
   a) $x^2 + 2x = x(x + 2)$

b) $3x^3 - 9x$  
   b) ______________

c) $x^2 - 6x - 27$  
   c) ______________

d) $x^2 - 100$  
   d) ______________

e) $x^2 + 10x - 24$  
   e) ______________

f) $2x^2 - 9x - 11$  
   f) ______________

g) $6x^2 + 5x + 1$  
   g) ______________

h) $3x^2 - 2x - 8$  
   h) ______________

2) Factor: (go to www.khanacademy.org or algebranation.com and look up “factoring”, there will be lots of videos for you to watch and learn factoring).

a) $x^2 + 6x + 9$  
   b) $x^2 - x -12$  
   c) $2x^2 + 5x + 3$  
   d) $x^2 - 9$  
   e) $4y^2 - 36$

f) $n^2 -6n -27$  
   g) $x^4 - 8x^2 - 9$  
   h) $r^2 -5r -6$  
   i) $x^2 + 9$
Part H  Simplifying Expressions

1) Simplify the following expressions:
   a) \((2x + 4) - \left(\frac{1}{5}x - 1\right)\)
   b) \((3x^2 - 7) + (5x - 2) - (x - 9)\)
   c) \((4x^4 - 2x^3 + 9x - 10) - (5x^5 - 6x + 2)\)
   d) \(x(2x + 3)\)
   e) \(4x(x^2 - 6x - 7)\)
   f) \((x + 3)(x - 2)\)
   g) \((2x - 5)(x + 6)\)
   h) \(9(1 - 3)^2 + 2\left(\frac{1}{2}\right)\)
   i) \(\sqrt{x} + \sqrt{x}\)
   j) \(2\sqrt{x} + 3\sqrt{x}\)
   k) \(2\sqrt{x} - 3\sqrt{x}\)
   l) \((4x^2 - 3y^2)^2\)

2) Which of the following sums, differences, and products can be simplified to \(6 - 3i\)?
   A  \((9 - 5i) + (3 - 2i)\)
   B  \((4 + 2i) + (2 - 5i)\)
   C  \((9 - 5i) - (3 - 2i)\)
   D  \((4 + 2i) - (2 - 5i)\)
   E  \(3i(-1 + 2i)\)
   F  \(3i(-1 - 2i)\)

3) Simplify:
   Sample: \(\sqrt{12} = \sqrt{(4)(3)} = 2\sqrt{3}\)
   a) \(\sqrt{8}\)
   b) \(\sqrt{27}\)
   c) \(\sqrt{98}\)
   d) \(\sqrt{24}\)
   e) \(\sqrt{48}\)
   f) \(\sqrt{40}\)
   g) \(\sqrt{512x^2}\)
**Part I  Finding points along a function:**

No Calculator:

\[ g(x) = \frac{-2}{3}x - 16 \quad a) \text{Find } g(-3) \quad b) \text{Find } g\left(\frac{-5}{3}\right) \]

\[ h(x) = -16x^2 - 4x + 12 \quad a) \text{Find } h(-3) \quad b) \text{Find } h\left(\frac{-1}{2}\right) \]

\[ n(x) = \sqrt{-1 \cdot \frac{1}{4}x + 2} \quad a) \text{Find } n(-2) \quad b) \text{Find } n\left(\frac{-2}{5}\right) \]

\[ j(x) = (3)(2)^x \quad a) \text{Find } j(4) \quad b) \text{Find } j(-1) \]
Part J Miscellaneous Questions

1) Find the slope of a line containing the points (-3, 1) and (1, -2).

2) Find the equation of a line in slope-intercept form containing the points (9, 2) and (3, 4).

3) Identify the center and radius of the circle 
\((x - 3)^2 + (y + 2)^2 = 49\).

Graph the circle on the coordinate plane below:

4) Write the following equation in slope-intercept form and identify the slope, x-intercept and y-intercept.

\[3(x - 4) = 12(x + 2)\]
Part J, Continued

5) Find the average rate of change from \(-2 \leq x \leq 1\) (hint: think slope)

\[ g(x) = \frac{-1}{4}x + 2 \]

6) For each of the given functions, create a new function \(g(x) = 3f(x) + 1\)

(in this problem you are multiplying the function by 3 and then adding one to that result)

a) \(f(x) = 2x + 1\)  
   b) \(f(x) = 2x^2 + 3x + 4\)  
   c) \(f(x) = 4x^2 - 3x + 2\)  
   d) \(f(x) = x^3 - 2x^2 + 3x + 1\)

7) Multiply \((3x^2 - 4y^2)(2x^2 + \frac{1}{2}y^2)\)

8) Find the next three terms in the sequence

9, 7, 5, _____, _____, _____

3, 1, \(\frac{1}{3}\), _____, _____

\(\frac{1}{2}, \frac{1}{4}, \frac{1}{8}\), _____, _____

9) A technology company ships equipment that contains laser printers that cost $700 each and color monitors that cost $200 each. He counts 30 boxes on the loading dock. The invoice states that the order totals $15000.

a) Write a system of two equations that represents the number of each item

b) How many laser printers and how many color monitors were delivered
10) The Regiment booster club sells beverages for $1.75 and candy for $1.50 at home games. Their goal is to have total sales of $525 for each game.

a) Create an equation that is a model for the different numbers of beverages and candy that can be sold to meet the goal.

b) Graph the equation, does the equation represent a function?

c) If the regiment sells 100 beverages and 200 pieces of candy, will they meet their goal?

11) A band is planning to record their first album. The initial start-up cost is $1500 and each download of the album will cost $4 to produce. They plan to sell each download for $10 each. How many downloadable albums must the band sell before they make a profit?

12) Solve the system:
\[
\frac{4}{3}x = -\frac{1}{5}y + 3
\]
\[
5 = \frac{2}{3}x - \frac{3}{5}y
\]

13) Solve for n:
\[
M = \sqrt{\frac{p(1-p)}{n}}
\]

14) Solve for x:
\[-2y = \sqrt{3x^2 - 15}\]

15) Simplify \(5\sqrt{80a^2}\)

16) Solve for \(x, x^3 = -125\)
Algebra II Regular Assignment (This assignment is recommended but not mandatory for students. The goal is to help students keep up with the algebra material over the summer months.)

Part A Systems of Equations

Solve the system of equations:

\[
\begin{align*}
    x + y &= 7 \\
    x - y &= 10
\end{align*}
\]

Solve using the substitution method:

\[
\begin{align*}
    y &= \frac{-1}{3}x + 2 \\
    3x - 2y &= 10
\end{align*}
\]

All 28 members at the local high school’s Ski Club went on a one-day ski trip. Members can rent skis for $16.00 per day or snowboards for $19.00 per day. The club paid a total of $478 for rental equipment.  

a) Write a system of equations that represents the number of members who rented the two types of equipment.  
b) How many members rented skis and how many rented snowboards?

Part B (No Calculator allowed on this section)
2. Write the radical expression in rational exponent form.

\( \sqrt[3]{k^7} \)

A. \( k^{\frac{7}{3}} \)
B. \( k^{3} \)
C. \( k^{7} \)
D. \( k^{10} \)

3. Evaluate: \( 5r + 7s \quad 5r + 7s \)
4. \( 5^2 \quad r = -4 \) and \( s = 2 \)
5. Solve \( 2y - 13 = -39 \)
6. Evaluate \( f(-3) \)

\( f(x) = 3x - 16 \)

7. What is one possible value for \( u \)?

\( 4 + u \geq -12 \)

8. Write the products as one power \( 9^3 \times 9^4 \)

9. Write the quotient as one power \( t^8 \div t^5 \)

10. Solve for \( x \):

\( \frac{x}{2} + 2 = -32 \)

11. Simplify \( |-4 + \frac{1}{2} (8)| \)

12. Solve and graph the inequalities

a. \( 8n < -24 \)

b. \( 9 + 6p \geq 45 \)
13. Simplify: \((2x+3) - (x^2+5x-10)\)

14. Solve \(\frac{3}{9} x = -9\)

15. Simplify: \(-\frac{2}{5} (5y + 15w) - 10w\)

**Part C**

Go to Desmos.com and roughly sketch the following equations:

(If you need help graphing on Desmos.com, go on youtube.com and watch a desmos video)

17) \(r(x) = \frac{1}{4} x + 6\)  
18) \(-2x + 3y = 16\)  
19) \(y = x^2\)

20) \(g(x) = x^2 - 4\)  
21) \(h(x) = (x - 4)^2\)  
22) \(t(x) = -x^2\)
<table>
<thead>
<tr>
<th>Number</th>
<th>Equation</th>
</tr>
</thead>
<tbody>
<tr>
<td>23)</td>
<td>( f(x) = x^3 - 4 )</td>
</tr>
<tr>
<td>24)</td>
<td>( z(x) = (x - 4)^3 )</td>
</tr>
<tr>
<td>25)</td>
<td>( y = x^3 )</td>
</tr>
<tr>
<td>26)</td>
<td>( y = x^2 + 2x - 4 )</td>
</tr>
<tr>
<td>27)</td>
<td>( q(x) = x^3 + 2x - 4 )</td>
</tr>
<tr>
<td>28)</td>
<td>( q(x) = -x^3 - 2x + 4 )</td>
</tr>
<tr>
<td>29)</td>
<td>( y = \frac{2}{x} )</td>
</tr>
<tr>
<td>30)</td>
<td>( y = \frac{-2}{x} )</td>
</tr>
<tr>
<td>31)</td>
<td>( b(x) = x^4 - x^3 - 2x^2 - 12 )</td>
</tr>
<tr>
<td>32)</td>
<td>( j(x) = \log_{10} x )</td>
</tr>
<tr>
<td>33)</td>
<td>( p(x) = (\log_{10} x) + 2 )</td>
</tr>
<tr>
<td>34)</td>
<td>( p(x) = \log_{10} (x - 2) )</td>
</tr>
</tbody>
</table>
35) \( y = 3(2)^x \)

36) \( y = 2(3)^x \)

37) \( y = e^x \)

---

**Part D**

In 38-40, solve for \( x \): (Use factoring or the Quadratic formula)

38) \( x^2 - x - 6 = 0 \)

39) \( x^2 -13x +36 = 0 \)

40) \( 3x^2 -6x -9 = 0 \)

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**Part E**

Probability introduction

2) A standard deck of cards has 52 cards with 4 suites (hearts, diamonds, clubs and spades). Find the given probabilities:

   e) Find the probability of picking a heart from a standard deck of cards  
      a)___________

   f) Find the probability of picking a spade from a standard deck of cards  
      b)___________

   g) Given the fact that you pull a heart from a deck of cards, what is the probability you choose a 2?  
      c)___________

   h) Given the fact that you pull a Queen from a deck of cards, what is the probability you choose a red card?  
      d)___________
A die is rolled twice. Find each probability.

e) \( P(2, \text{ followed by a } 3) \)

f) \( P(1., \text{ then any number}) \)

Part F  Factoring

4) Factoring problems (No Calculator)

Factor:

i) \( x^2 + 2x \)

j) \( 3x^3 - 9x \)

k) \( x^2 - 6x - 27 \)

l) \( x^2 - 100 \)

m) \( 6x^2 + 5x + 1 \)

n) \( 4y^2 - 36 \)

Part G  Simplifying Expressions

2) Simplify the following expressions:

m) \( (2x + 4) - \left(\frac{1}{5} x - 1\right) \)

n) \( (4x^4 - 2x^3 + 9x - 10) - (5x^5 - 6x + 2) \)

o) \( 4x(x^2 - 6x - 7) \)

p) \( (x + 3)(x - 2) \)

q) \( 2\sqrt{x} + 3\sqrt{x} \)

r) \( (4x^2 - 3y^2)^2 \)

Sample: \( \sqrt{12} = \sqrt{(4)(3)} = 2\sqrt{3} \)

h) \( \sqrt{8} \)

i) \( \sqrt{27} \)

j) \( \sqrt{24} \)

k) \( \sqrt{48} \)

l) \( \sqrt{512x^2} \)
Part J Miscellaneous Questions

3) Find the slope of a line containing the points (-3, 1) and (1, -2).

4) Find the equation of a line in slope-intercept form containing the points (9, 2) and (3, 4).

5) Write the following equation in slope-intercept form and identify the slope, x-intercept and y-intercept.

\[3(x - 4) = 12(x + 2)\]

8) Find the next three terms in the sequence

9, 7, 5, _____, _____, _____
10) The Regiment booster club sells beverages for $1.75 and candy for $1.50 at home games. Their goal is to have total sales of $525 for each game.

a) Create an equation that is a model for the different numbers of beverages and candy that can be sold to meet the goal.