TODAY I WILL DO WHAT OTHERS WON'T, SO TOMORROW I CAN DO WHAT OTHERS CAN'T.
Palomar College GSFP Tutor Training
Test Prep and Honors Courses

Jack Friedman
Study Smart Tutors Inc
why are we here?
Warm Up

• What do tests like the SAT and ACT measure?
Opportunity Gap

Average SAT Scores by Family Income (2013)

Source: College Board Total Group Profile Report 2013
Fewer than 9% of students with family incomes less than $24,000 met all four college readiness benchmarks.

The Benchmark attainment level for students in the $120,000–$150,000 range is more than twice that for students in the $50,000 to $60,000 range.
Question
How many points on the SAT make the difference between a student being accepted or rejected from a certain university?
Answer

30 points
What am I currently doing to prepare students and families for these exams?
Old vs. New
<table>
<thead>
<tr>
<th>OLD SAT</th>
<th>NEW SAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Sentence Completions, emphasis on vocabulary</td>
<td>• <strong>NO</strong> Sentence Completions; however, there are 2 <em>vocabulary in context</em> questions in every reading passage</td>
</tr>
</tbody>
</table>
| • Math sections allowed calculators  
• Math only tests up to **Algebra II level**  
• “**Trickier**” math questions | • Only one of two sections permits calculators  
• Math includes **Trigonometry**  
• More straightforward math questions |
<p>| • Reading &amp; Writing scores are separate | • Evidence Based Reading &amp; Writing scores are combined |
| • Scaled scores total 200-800 for each section for a total possible 2400 points | • Scaled scores are 1-40 &amp; then converted to “area” scores of 200-800 for total of 1600 points. |
| • 25-minute <strong>required</strong> essay integrated into writing scaled score | • 50-minuted <strong>optional</strong> essay is scored separately |
| • Guessing Penalty (-1/4 point for wrong answers) | • No guessing penalty |
| • No emphasis on Science questions | • Science-related topics tested in all sections |
| • No charts/graphs/tables | • Charts/graphs/tables in Math, EB Reading, EB Writing |</p>
<table>
<thead>
<tr>
<th><strong>ACT</strong></th>
<th><strong>NEW SAT (2016)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Length</strong></td>
<td>3 hours 25 minutes</td>
</tr>
<tr>
<td><strong>Sections</strong></td>
<td>4 Sections (+1 optional essay)</td>
</tr>
<tr>
<td><strong>Areas Tested</strong></td>
<td>English, Math, Science, Reading (Optional Writing)</td>
</tr>
<tr>
<td><strong>Reading Comparison</strong></td>
<td>4 Passages, 10 questions per passage</td>
</tr>
<tr>
<td><strong>Science Comparison</strong></td>
<td>Science Reasoning (READING COMP)</td>
</tr>
<tr>
<td><strong>Math Comparison</strong></td>
<td>¼ of overall score,</td>
</tr>
<tr>
<td><strong>Essay Comparison</strong></td>
<td>Optional, last section, 30 min</td>
</tr>
<tr>
<td><strong>Scoring</strong></td>
<td>1-36, 21 is national average</td>
</tr>
<tr>
<td><strong>Guessing Penalty</strong></td>
<td>None</td>
</tr>
<tr>
<td><strong>How to Prepare</strong></td>
<td>Content is difficult but straightforward</td>
</tr>
<tr>
<td><strong>Great for students who are...</strong></td>
<td>Good writers, strong readers, “book-smart”, students who have a strong foundation in each subject</td>
</tr>
</tbody>
</table>
The first administration of the redesigned SAT® will be in spring 2016.

Today’s 11th graders will be the first to take the redesigned SAT.
# NEW SAT Content

<table>
<thead>
<tr>
<th>Sections</th>
<th>Time</th>
<th>Number of Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td>65 minutes</td>
<td>52 questions</td>
</tr>
<tr>
<td>Writing &amp; Language Test Test</td>
<td>35 minutes</td>
<td>44 questions</td>
</tr>
<tr>
<td>Math (no calculator)</td>
<td>25 minutes</td>
<td>20 questions</td>
</tr>
<tr>
<td>Math (calculator permitted)</td>
<td>55 minutes</td>
<td>37 questions (1 Extended Question)</td>
</tr>
<tr>
<td>Essay (Optional)</td>
<td>50 minutes</td>
<td>1 question</td>
</tr>
</tbody>
</table>
Timeline for SAT-ACT Changes

- December 2014: Practice PSATs released
- March 2015: Practice SATs released; College Board book to follow
- Spring/Fall 2015: Digital ACT and ACT changes
- October 2015: New PSAT for Class of 2017 and 2018
- January 2016: Final old SAT
- March 2016: New SAT released; First digital SAT

Class of 2017 (rising sophomores) will straddle the old and new SAT. Many will take practice exams to determine their optimal test.
Why?
Competition
8 Key Changes to the SAT

1. Relevant words in context
2. Command of evidence
3. Essay analyzing a source
4. Math focused on three key areas
5. Problems grounded in real-world contexts
6. Analysis in science and social studies
7. Founding documents and great global conversation
8. No penalty for wrong answers
KEEP CALM AND TAKE A GUESS
The SAT: Old vs. New

Old (Current)
The consumer advocate claimed that while drug manufacturers tout the supposed advantages of their proprietary brands, generic versions of the same medications are often equally efficacious.

(A) tout . . efficacious  
(B) research . . innocuous  
(C) market . . prohibitive  
(D) laud . . counterproductive  
(E) extract . . prescriptive

New (2016)
[. . .] As Kingman developed as a painter, his works were often compared to paintings by Chinese landscape artists dating back to CE 960, a time when a strong tradition of landscape painting emerged in Chinese art. Kingman, however, vacated from that tradition in a number of ways, most notably in that he chose to focus not on natural landscapes, such as mountains and rivers, but on cities. [. . .]

(The following question relates to the underlined portion in the excerpt above.)

(A) NO CHANGE  
(B) evacuated  
(C) departed  
(D) retired  

INFOGRAPHIC BY JOHN WEI
SOURCE: COLLEGEBOARD
Interpreting Charts

Which choice completes the sentence with accurate data based on the graph?

A) NO CHANGE
B) warning, however, that job growth in urban and regional planning will slow to 14 percent by 2020.
C) predicting that employment of urban and regional planners will increase 16 percent between 2010 and 2020.
D) indicating that 14 to 18 percent of urban and regional planning positions will remain unfilled.
We the People
ESSAY

Time — 25 minutes

Turn to page 2 of your answer sheet to write your ESSAY.

The essay gives you an opportunity to show how effectively you can develop and express ideas. You should care to develop your point of view, express your ideas logically and clearly, and use vocabulary.

Your essay must be written on the lines provided on your answer sheet. You will have enough space to write on each line. Remember that people who are reading your essay are not familiar with your writing. If you are writing is legible to them, they will not be able to understand your ideas.

Important: You will receive a score of zero if your essay is not legible to them. You will receive partial credit only for what you write on your answer sheet. If you reflect your original and individual work, your scores for the entire test may be canceled.

An electronic copy of your essay will be made available immediately to your designated score recipients: colleges, universities, and scholarship programs.

You have twenty-five minutes to write an essay on the topic assigned below.

Think carefully about the issue presented in the following excerpt and the question below.

A colleague of the great scientist James Watson remarked that Watson was always "lounging around, arguing about problems instead of doing experiments." He concluded that "There is more than one way of doing good science." It was Watson's form of idleness, the scientist went on to say, that allowed him to solve "the greatest of all biological problems: the discovery of the structure of DNA." It is a point worth remembering in a society overly concerned with efficiency.

Adapted from John C. Polanyi, "Understanding Discovery"
Redesigned Math

\[
\text{Math Anxiety} = \text{Test Anxiety} \left( \text{Fear of numbers} + \text{Fear of unknown} \right)
\]
Redesigned Math
Redesigned Math

EXAMPLE 1

When a scientist dives in salt water to a depth of 9 feet below the surface, the pressure due to the atmosphere and surrounding water is 18.7 pounds per square inch. As the scientist descends, the pressure increases linearly. At a depth of 14 feet, the pressure is 20.9 pounds per square inch. If the pressure increases at a constant rate as the scientist’s depth below the surface increases, which of the following linear models best describes the pressure $p$ in pounds per square inch at a depth of $d$ feet below the surface?

A) $p = 0.44d + 0.77$
B) $p = 0.44d + 14.74$
C) $p = 2.2d - 1.1$
D) $p = 2.2d - 9.9$
The preceding graph shows the amount of protein supplied by five different food products, A, B, C, D, and E, as a percentage of their total weights. The costs of 10 grams of products A, B, C, D, and E are $2.00, $2.20, $2.50, $4.00, and $5.00, respectively. Which of the five food products supplies the most protein per dollar?

A. A  
B. B  
C. C  
D. E
A researcher places two colonies of bacteria into two petri dishes that each have area 10 square centimeters. After the initial placement of the bacteria ($t = 0$), the researcher measures and records the area covered by the bacteria in each dish every ten minutes. The data for each dish were fit by a smooth curve, as shown above, where each curve represents the area of a dish covered by bacteria as a function of time, in hours. Which of the following is a correct statement about the data above?
ACT Basics
1 Point Per Correct Answer
No Guessing Penalty
All Questions Worth the Same
When is the ACT Offered?

The 2015-2016 test dates and registration deadlines can be found by visiting ACT’s website

ACT Exams Offered in...

1. September
2. October
3. December
4. February
5. April
6. June
The Four ACT Tests
<table>
<thead>
<tr>
<th>Section</th>
<th># questions</th>
<th>Time</th>
<th>ACT College Readiness Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>English</strong></td>
<td>75</td>
<td>45</td>
<td>18</td>
</tr>
<tr>
<td><strong>Math</strong></td>
<td>60</td>
<td>60</td>
<td>22</td>
</tr>
<tr>
<td><strong>Reading</strong></td>
<td>40</td>
<td>35</td>
<td>21</td>
</tr>
<tr>
<td><strong>Science</strong></td>
<td>40</td>
<td>35</td>
<td>24</td>
</tr>
<tr>
<td>Optional Writing Test</td>
<td>1 essay</td>
<td>30</td>
<td></td>
</tr>
</tbody>
</table>
Test-Taking Tips
The Test Booklet:
What challenges will our students face?
Helping Students Build Confidence
35. Cindy walked to work at an average speed of 6 miles an hour and biked back along the same route at 10 miles per hour. If her total traveling time was 2 hours, how many miles is it from her house to work?

A. 6  
B. 6.25  
C. 7.5  
D. 8  
E. 10
Your biggest challenge?
SAT Prep = College Readiness

The SAT College and Career Readiness Benchmark

- 44% in 2009
- 44% in 2010
- 43% in 2011
- 43% in 2012
- 43% in 2013

43% Met the SAT Benchmark

57% Did Not Meet the SAT Benchmark

Study Smart Tutors 2014
What will your role be in helping students prepare for standardized tests?
What can you Do NOW to Prepare your Students?
Build Skills NOW
What We Should Be Doing Now...
Free Resources

Study Smart Tutors 2015
Will This Be Effective?
It’s not which test you teach, but how you teach that matters
“I want to do well on the ACT/SAT”
Setting Goals

“I want to do well in my biology class”
Setting Goals

HS Biology

I want an A

An A means 90%+

How do I track my progress?
SMART GOALS

- Specific
- Measurable
- Attainable
- Results-Based
- Timed
UC Riverside

Average ACT Composite = 25

Math, Reading, English, Science

Math Raw = 43, Reading Raw = 29
Test PREP GOALS

1. What schools do I want to go to?
2. What SAT scores do those schools typically require?
3. How many questions do I need to answer correctly in each section?
<table>
<thead>
<tr>
<th>Scaled Score</th>
<th>English (75 questions)</th>
<th>Math (60 questions)</th>
<th>Reading (40 questions)</th>
<th>Science (40 questions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>36</td>
<td>75</td>
<td>60</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>35</td>
<td>73-74</td>
<td>59</td>
<td>39</td>
<td>39</td>
</tr>
<tr>
<td>34</td>
<td>71-72</td>
<td>58</td>
<td>38</td>
<td>-</td>
</tr>
<tr>
<td>33</td>
<td>70</td>
<td>56-57</td>
<td>37</td>
<td>38</td>
</tr>
<tr>
<td>32</td>
<td>69</td>
<td>55</td>
<td>36</td>
<td>37</td>
</tr>
<tr>
<td>31</td>
<td>67-68</td>
<td>54</td>
<td>35</td>
<td>-</td>
</tr>
<tr>
<td>30</td>
<td>66</td>
<td>52-53</td>
<td>34</td>
<td>36</td>
</tr>
<tr>
<td>29</td>
<td>65</td>
<td>50-51</td>
<td>32-33</td>
<td>35</td>
</tr>
<tr>
<td>28</td>
<td>63-64</td>
<td>48-49</td>
<td>31</td>
<td>33-34</td>
</tr>
<tr>
<td>27</td>
<td>62</td>
<td>45-47</td>
<td>30</td>
<td>32</td>
</tr>
<tr>
<td>26</td>
<td>60-61</td>
<td>42-44</td>
<td>29</td>
<td>30-31</td>
</tr>
<tr>
<td><strong>25</strong></td>
<td><strong>58-59</strong></td>
<td><strong>40-41</strong></td>
<td><strong>27-28</strong></td>
<td><strong>28-29</strong></td>
</tr>
<tr>
<td>24</td>
<td>56-57</td>
<td>37-39</td>
<td>26</td>
<td>26-27</td>
</tr>
<tr>
<td>23</td>
<td>54-55</td>
<td>35-36</td>
<td>24-25</td>
<td>25</td>
</tr>
<tr>
<td>22</td>
<td>52-53</td>
<td>33-34</td>
<td>23</td>
<td>23-24</td>
</tr>
<tr>
<td>21</td>
<td>49-51</td>
<td>31-32</td>
<td>22</td>
<td>21-22</td>
</tr>
<tr>
<td>20</td>
<td>46-48</td>
<td>29-30</td>
<td>20-21</td>
<td>19-20</td>
</tr>
<tr>
<td>19</td>
<td>43-45</td>
<td>26-28</td>
<td>19</td>
<td>18</td>
</tr>
<tr>
<td>18</td>
<td>41-42</td>
<td>24-25</td>
<td>18</td>
<td>16-17</td>
</tr>
<tr>
<td>17</td>
<td>39-40</td>
<td>21-23</td>
<td>16-17</td>
<td>15</td>
</tr>
<tr>
<td>16</td>
<td>36-38</td>
<td>17-20</td>
<td>15</td>
<td>14</td>
</tr>
<tr>
<td>15</td>
<td>33-35</td>
<td>14-16</td>
<td>14</td>
<td>13</td>
</tr>
<tr>
<td>14</td>
<td>30-32</td>
<td>11-13</td>
<td>12-13</td>
<td>12</td>
</tr>
<tr>
<td>13</td>
<td>28-29</td>
<td>9-10</td>
<td>11</td>
<td>11</td>
</tr>
</tbody>
</table>
Reflect

How can I implement this goal setting lesson with my students?
“Everyone’s got a plan

Until they get hit.”

-Mike Tyson
Discussion

• In your IDEAL world, what tools will your students bring to the ACT and SAT?

  – What steps will I take to get them there?
"The greatest danger for most of us is not that our aim is too high and we miss it but that it is too low and we reach it."

Michelangelo
What are the most common AP or Honors Classes
Advanced Placement Program® (AP®) courses gives students a head start on college.

Taking the end-of-course AP Exam sends a powerful message to colleges and universities that a student is ready for them, and can enable students to gain admission, college credit, and placement into advanced courses.
Students who take AP courses and exams are much more likely than their peers to complete a bachelor’s degree in four years or less.

Most exams last around 3 hours, and contain a free response and multiple-choice section.

### The AP English Language & Composition Exam contains the following:

<table>
<thead>
<tr>
<th>Sections</th>
<th>Time</th>
<th># of Questions</th>
<th>% of Exam Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part I: Multiple Choice</td>
<td>60 min</td>
<td>60 multiple choice</td>
<td>45%</td>
</tr>
<tr>
<td>Part II: Reading/Planning</td>
<td>15 min</td>
<td>Variable # of sources</td>
<td>55%</td>
</tr>
<tr>
<td>Part III: Essay Questions</td>
<td>120 min</td>
<td>3 Essay Prompts</td>
<td></td>
</tr>
</tbody>
</table>

### The AP English Literature & Composition Exam contains the following:

<table>
<thead>
<tr>
<th>Sections</th>
<th>Time</th>
<th># of Questions</th>
<th>% of Exam Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part I: Multiple Choice</td>
<td>60 min</td>
<td>60 multiple choice</td>
<td>45%</td>
</tr>
<tr>
<td>Part II: Essay Questions</td>
<td>120 min</td>
<td>3 Essay Prompts</td>
<td>55%</td>
</tr>
</tbody>
</table>
The AP World History Exam contains the following:

<table>
<thead>
<tr>
<th>Sections</th>
<th>Time</th>
<th># of Questions</th>
<th>% of Exam Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part I: Multiple Choice</td>
<td>55 min</td>
<td>70 multiple choice</td>
<td>50%</td>
</tr>
<tr>
<td>Part II: DBQ</td>
<td>50 min</td>
<td>1 Question</td>
<td>50%</td>
</tr>
<tr>
<td>Part III: Change over Time Essay</td>
<td>40 min</td>
<td>1 Essay Prompt</td>
<td></td>
</tr>
<tr>
<td>Part IV: Comparative Essay</td>
<td>40 min</td>
<td>1 Essay Prompt</td>
<td></td>
</tr>
</tbody>
</table>

The AP United States History Exam is divided into 4 sections. The sections are represented by the table below:

<table>
<thead>
<tr>
<th>Sections</th>
<th>Time</th>
<th># of Questions</th>
<th>% of Exam Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part I: Multiple Choice</td>
<td>55 min</td>
<td>55 multiple choice</td>
<td>40%</td>
</tr>
<tr>
<td>Part II: Short Answer</td>
<td>50 min</td>
<td>4 short answer</td>
<td>20%</td>
</tr>
<tr>
<td>Part III: DBQ</td>
<td>60 min</td>
<td>1 Document-Based Question</td>
<td>25%</td>
</tr>
<tr>
<td>Part IV: Long Essay</td>
<td>35 min</td>
<td>1 Essay Prompt</td>
<td>15%</td>
</tr>
</tbody>
</table>
How are the AP Exams scored?

The multiple-choice sections of each AP exam are scored by machine, but the free response sections are scored by college faculty and AP teachers.

A generalized AP free response scale shows how the AP free responses can total “9.”

<table>
<thead>
<tr>
<th>AP Score</th>
<th>Qualification</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Extremely well qualified</td>
</tr>
<tr>
<td>4</td>
<td>Well qualified</td>
</tr>
<tr>
<td>3</td>
<td>Qualified</td>
</tr>
<tr>
<td>2</td>
<td>Possibly qualified</td>
</tr>
<tr>
<td>1</td>
<td>No recommendation</td>
</tr>
</tbody>
</table>

Both the free response section and the multiple-choice raw score are multiplied by a number to total a “composite” score, which is equivalent to a scaled score 1-5.
5 - Extremely Well Qualified
   Statistically equates to high A’s in the comparable college course

4 - Well Qualified
   Statistically equates to low A’s and high B’s in the comparable college course

3 - Qualified
   Statistically equates to low B’s and high C’s in the comparable college course

2 - Possibly Qualified
   Statistically equates to low C’s and high D’s in the comparable college course

1 - No Recommendation
When will students take AP Exams?

• The AP Exams are typically scheduled during the 1st few weeks in May.
• There are no “make up” dates, but students may sign up the following year.
• Students should backwards plan test preparation based on these dates.
AP Exams and Their Importance

Fill out the KWL chart & share what you want to know more about with a partner.

End
Our Challenges?

NOT AN EXPERT
Syllabus Scavenger Hunt

• Use the syllabus for your AP (or other) class to fill out the syllabus scavenger hunt.
Time Management for Tests
Order of Difficulty?

Some AP multiple-choice sections get increasingly difficult as you move to the end of the section. Other AP exams (such as English Language & Literature) have challenging and easy problems mixed throughout the section.

You should *always* answer the easy questions for easy points.
Be Quick But Don’t Hurry

• On the AP exams, every multiple-choice question is *worth the same amount!* Don’t rush through the easy questions to get to the harder ones. You don’t have to answer every question, but you should answer every question you know to answer.

• Over time, develop a strategy where you can approach as many questions as possible *accurately*, and then guess on those questions you have identified as “impossible” or difficult.
Put Questions in Three Categories

**Bloody Nose**
*(doable right now)*
Put Questions in Three Categories

**Stomach Ache**
*(doable but will take time)*
Put Questions in Three Categories

Heart Attack
(too late to do anything)
Tips for Answering Multiple-Choice Questions on the AP Exams

3. Keep in mind that being somewhat familiar with an answer choice does not automatically imply that the said choice is the correct answer.

4. Check for “umbrella choices”, which are answer choices that contain other choices.
5. Practice **cover and predict.** (cover the answer choices w/ your hand, predict the answer, then try to match your answer w/ the choices).

6. Be **suspicious of** answer choices containing absolute or **negative words.** (NEVER, ALWAYS)

7. Look for opposite answer choices; it is likely than one of the two is correct.
8. Watch out for answer choices that are very similar to one another or are “equivalent.” One of them is likely the correct answer; select the best one among them (the “umbrella” choice).

9. Watch out for the choice “all of the above.” If there are at least two other answer choices that seem to be correct, there is a high probability that the choice “all of the above” is the correct answer.
10. When you’re not docked for incorrect answers, it pays to guess.

11. Be wary of NOT/EXCEPT/LEAST/questions. There are numerous negative questions on AP tests that may say, “. . . which was the LEAST important factor. . .?” “. . . which of the following was NOT a cause of . . .?” “. . . all the following were causes EXCEPT. . .”
Strategies for MC

13. If an answer choice sounds too good to be true, it is probably the incorrect answer.

Examine the following question from the 2001 released AP Exam: *Throughout the first half of the nineteenth century women reformers were most active in the cause of*

A. temperance  
B. woman suffrage  
C. pacifism  
D. immigrants’ rights  
E. workers’ rights

Woman suffrage is too good to be true, but this answer served to distract students away from the correct answer. Although the women’s suffrage movement was occurring at this time, the correct answer was A.
### Example Problem(s)

3. A photographer increases the size of a picture by 50%. The image still was not large enough so she increased the image by another 25%. What percent of its original size is the picture now?

| A. 75.0% |
| B. 87.5% |
| C. 175.0% |
| D. 187.5% |

### Model Response

Be on the look out for common errors. Do a quick logic check or estimation. If you increase the size of something, it gets larger, so as a percentage the answer must be greater than 100%. Cross off choices “A” and “B”. A common error would be adding 50 and 25 to get 75, so even if you are not sure how to do the math, cross off choice “C” and select “D.”

You Try Solving
1. Make sure the statement is 100% true.  
1/2 right, 1/2 wrong is always an answer choice on multiple-choice questions, and when having to evaluate whether something is true or false on a true false section, make sure the statement is **100%** correct.
2. Watch out for extreme language; you should be suspicious that it is false.

Examples:

a. ONLY
b. ENTIRELY
c. ALWAYS
d. NEVER
e. NONE
3. Look for terms like *ordinarily, usually, sometimes, often* etc” which make it more likely that the statement could be *true.*
Ways to Study

7. **Quiz apps for your phone:**
   - AP Exam App: McGraw Hill
   - AP Exam Review Flashcards LITE
   - AP US History, Practice and Quiz (for Kindle, Tablet & Phone)
   - AP Exam Planner (McGraw Hill)
Fill out the KWL chart & share what you want to know more about with a partner.

End
Great Websites for AP Practice Tests


And The College Board Website of course: https://apstudent.collegeboard.org/takingtheexam/preparing-for-exams
• In your IDEAL world, what tools will your students bring to AP and honors classes?

— What steps will I take to get them there?
What will your role be in helping students prepare for standardized tests?
WHAT'S NEXT?
Jack Friedman
(818) 457-1728
JackF@StudySmartTutors.com
www.StudySmartTutors.com