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Inquiry-Guided Learning in a Capitalism Class

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ABSTRACT

This paper presents the results of using the Inquiry-guided learning teaching method to teach students in a Capitalism class. The students worked in groups to assemble information about the 2008 Economic Stimulus Plan. Assessment methods included pretest and posttest. Results were improvement in the posttest scores and dynamic interpersonal interactions.

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Introduction

According to North Carolina State University Inquiry-guided learning (IGL) refers to an array of classroom practices that promotes student learning through guided and, increasingly, independent investigation of questions and problems for which there are no single answer. Rather than teaching the results of others' investigations, which students learn passively, instructors assist students in mastering and learning through the process of active investigation itself. This process involves the ability to formulate good questions, identify and collect appropriate evidence, present results systematically, analyze and interpret results, formulate conclusions, and evaluate the worth and importance of those conclusions. It may also involve the ability to identify problems, examine problems, generate possible solutions, and select the best solution with appropriate justification. [1] Dr. Virginia S. Lee has found that Inquiry-guided learning promotes learning through students' active investigation of questions, problems, and issues, often for which there is no one, single answer. It fosters complex student learning outcomes such as critical thinking, habits of independent inquiry, responsibility for one's own learning, and intellectual growth and maturity.[2] According to Green, the term suggests classroom practices that help students to raise, sharpen, and follow through on their own questions, to respond to questions posed by the faculty member by asking further questions and seeking answers to them, and to develop a habitual sense of inquiry that will transcend the boundaries of the course. The assumption, and it is being continuously and self-consciously questioned in the IGL classroom, is that students retain information and concepts much better if they have internalized the related questions, and they learn better how to do research and evaluate evidence if they have made these questions their own. A further assumption is that students are more ready to apply the standards of critical thinking, such as accuracy, precision, clarity, breadth, depth, relevance and logic, to their work and thereby improve their critical thinking skills, if the work is propelled and guided by questions of importance to the students. [3]

Examples of Inquiry-guided Learning

In History classes, students act as apprentice historians. History becomes a dialogue between students, historical sources, and other historians, rather than a closed, fixed set of dead facts. [4]
Fundamental to IGL in sociology is the notion that students should think and act like sociologists. IGL activities provide a means whereby the instructor models and the student practices the same disciplinary activities. Students "do" sociology rather than just learning about the results of others. [5]

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[1] **First Year Inquiry Faculty Information**
[2] **Virginia S. Lee & Associates Higher Education Consulting Teaching, Learning and Assessment**

[3] **Greene, Journal of Education**
[4] **Promoting Learning through Inquiry** *Virginia S. Lee*
[5] ***Inquiry-Guided Learning in Sociology***

Methods

Pedagogy

This Inquiry-guided learning method was recently used in the Blacks in Capitalism Class:
- The first step was to give the students a pretest relating to the Economic Stimulus Plan.
- Step 2 was to divide the class into teams of 5 and to give them an envelope with strips of information. The strips of information were from articles that pertained to the Economic Stimulus Plan. The teams were instructed to put the strips into categories. The students wrote the categories on self-adhesive papers.
- Step 3 was the posttest relating to the Economic Stimulus Plan.
- Step 4 was an assessment of the learning by the students that asked them their role in the team and their reactions to the tests.

Students in the Team Assignment and the tests.

> Economic Stimulus Explanations cut into strips for the teams to categorize
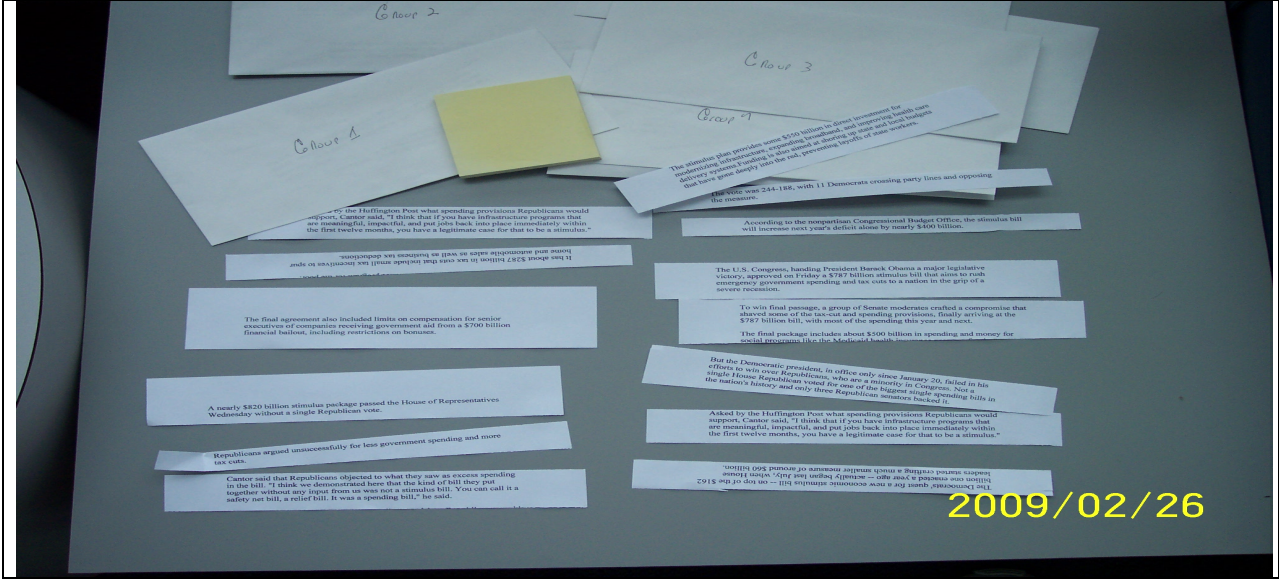
Statistical Analysis Techniques

The pretests, posttests, and assessments were analyzed with Version 16 of the Statistical Program for the Social Sciences to produce frequency distributions and the charts that follow this narrative.

Findings

The results included a much better performance by most of the students on the posttest. Additional results included dynamic interpersonal interactions during the active involvement of the students in the categorization of the contents of the envelopes. After the team interactions; the students were more comfortable with the posttest.

Implications

Inquiry-guided learning is a skill that has broad implications for the individual, the educational system, and for society. Inquiry-guided learning skills enable an individual to use analyze and synthesize databases, journal articles, and internet information to achieve a wide variety of

academic, work-related, and personal goals. Information literate individuals necessarily develop some technology skills.

These are the Pre and Posttest Questions and the Correct Answer is shaded:

How much did the House of Representatives Approve?

a	b	c	d	e
$780 Billion	$800 Billion	$810 Billion	**$820 Billion**	$830 Billion

4 Correct Answers on pretest vs 10 Correct Answers on posttest

How much did the Senate Approve?

a	b	c	d	e
$780 Billion	$785 Billion	$795 Billion	$797 Billion	**$787 Billion**

1Correct Answer on pretest vs 13 Correct Answers on posttest

How many Republican Representatives voted in favor?

a	b	c	d	e
1	2	6	**0**	10

10 Correct Answers on pretest vs 13 Correct Answers on posttest

How many Republican members of Congress voted in favor?

a	b	c	d	e
10	2	6	**3**	5

3 Correct Answers on pretest vs 7 Correct Answers on posttest

How many million Jobs do Democrats hope to save or create?

a	b	c	d	e
5	**3.5**	10	3	8.5

6 Correct Answers on pretest vs 13 Correct Answers on posttest

The plan provides how many billion Dollars for direct investment?

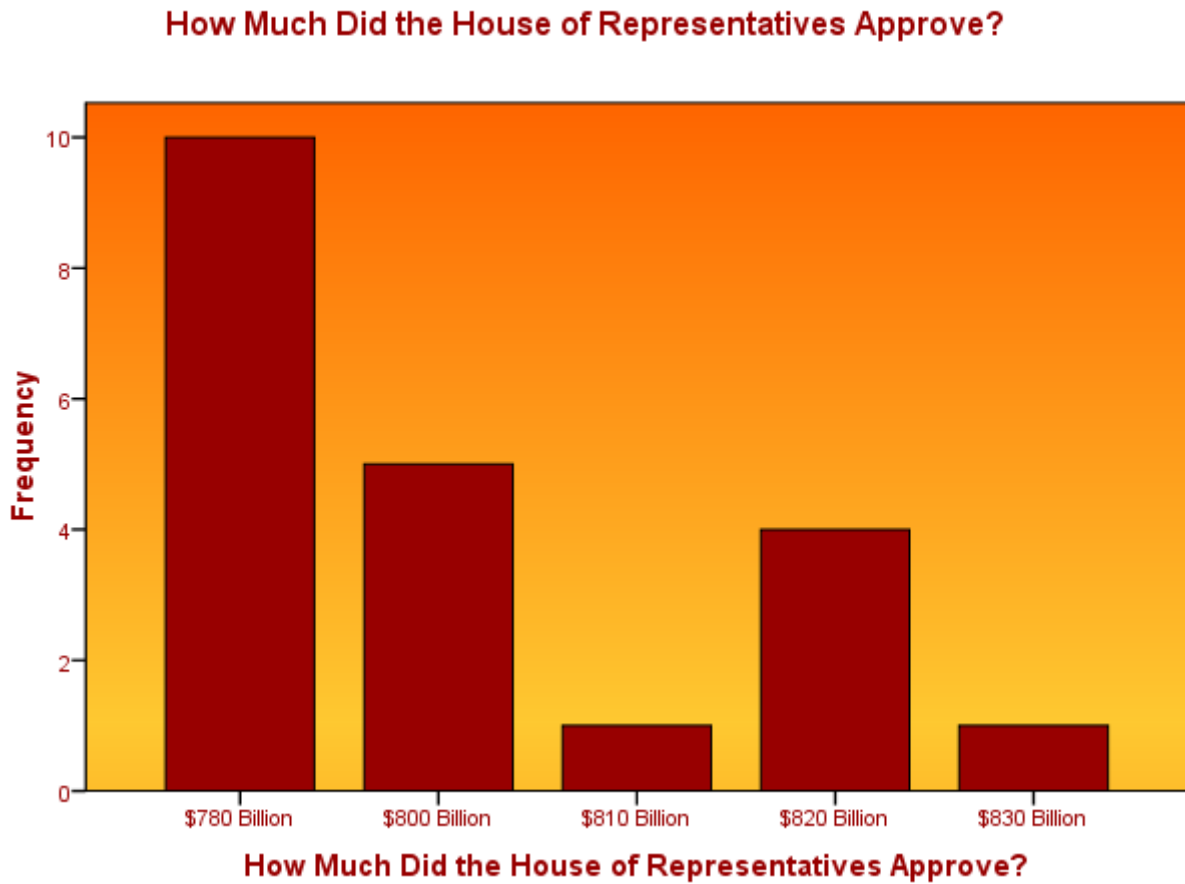| a	b	c	d	e
250	350	450	**550**	650

3 Correct Answers on pretest vs 3 Correct Answers on posttest

The plan provides how many billion Dollars for tax incentives?

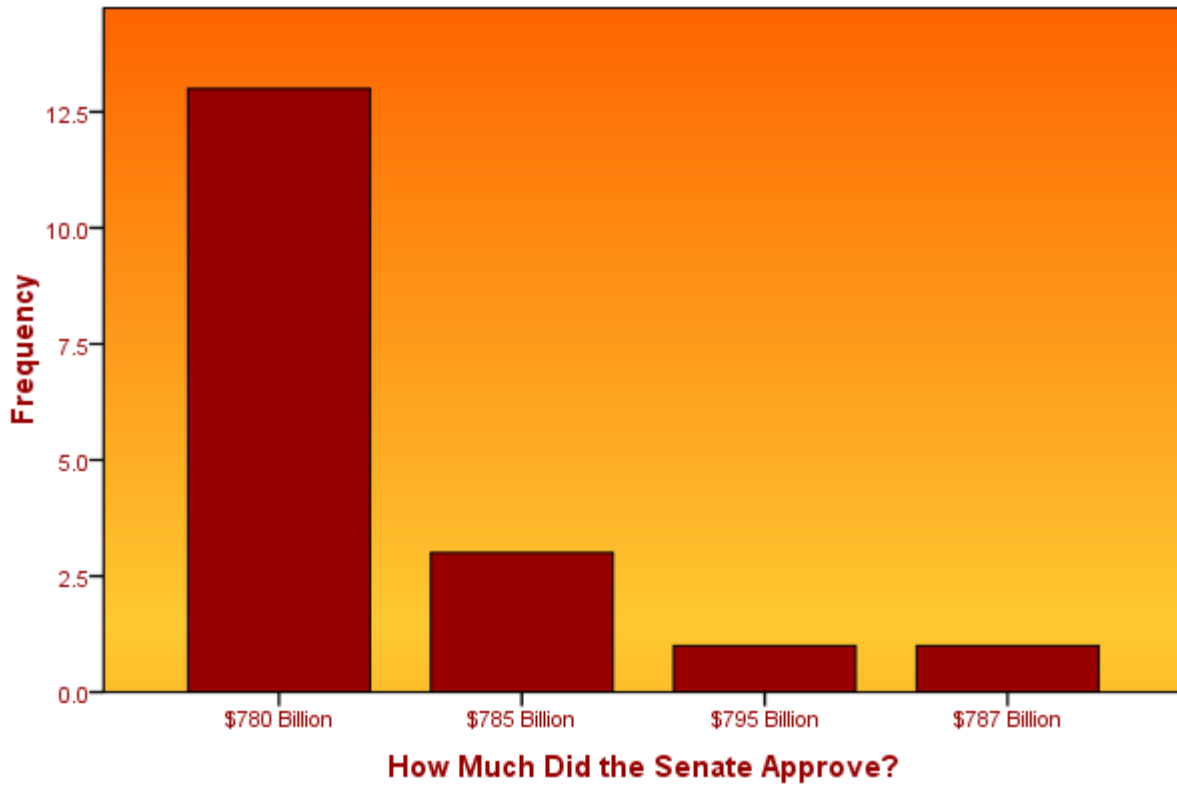| a	b	c	d	e
287	387	487	587	187

3 Correct Answers on pretest vs 7 Correct Answers on posttest

Bar Charts for the Pretest Results

How Much Did the House of Representatives Approve?

(4 Correct Answers)

How Much Did the Senate Approve?

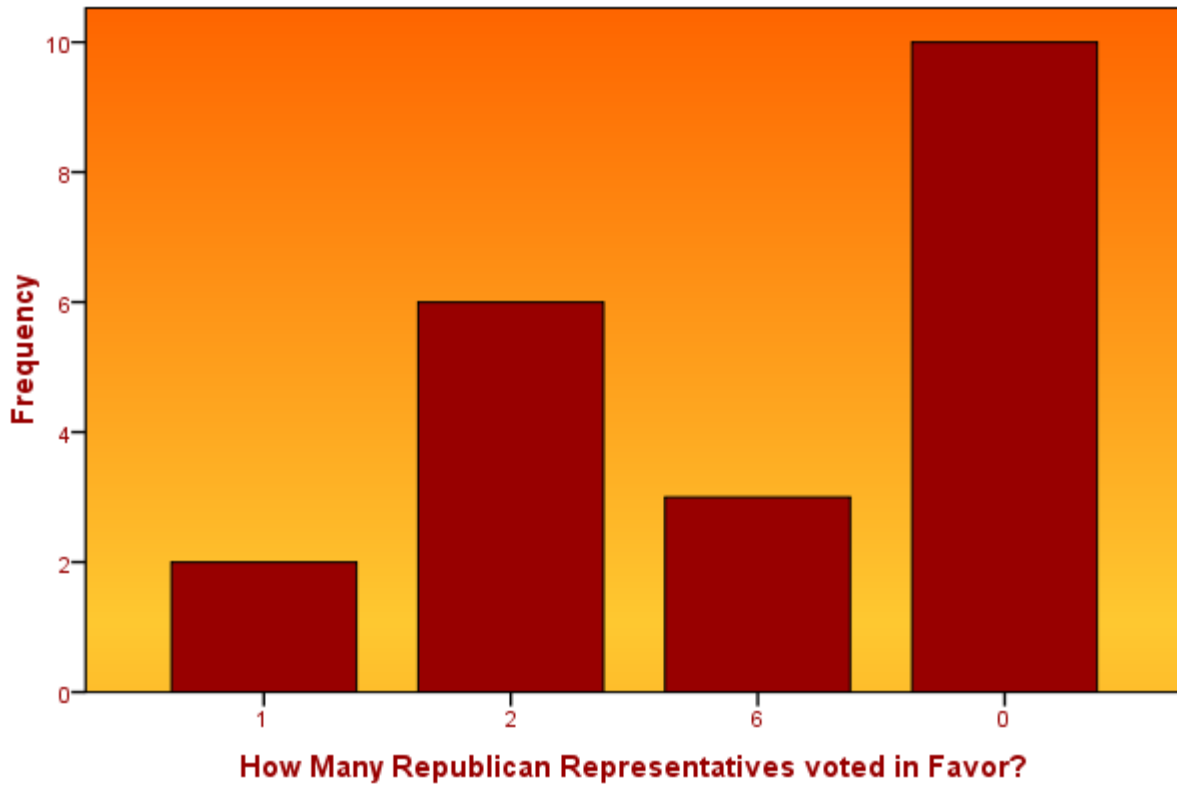**How Much Did the Senate Approve?**

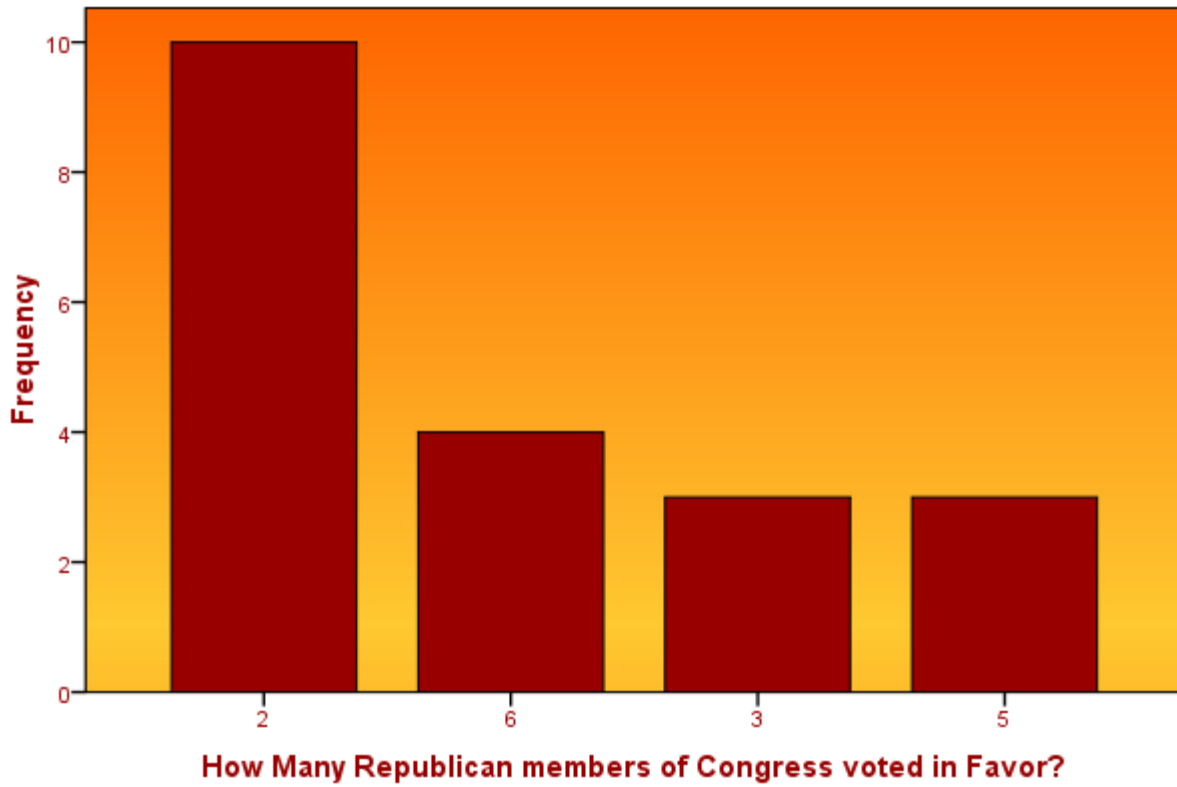**1 Correct Answer**

How Many Republican Representatives voted in Favor?

10 Correct Answers

How Many Republican members of Congress voted in Favor?

3 Correct Answers

How many million jobs do Democrats hope to save or create?

How many million jobs do Democrats hope to save or create?

6 Correct Answers

How many million dollars for direct investment?

3 Correct Answers

How many million dollars for tax incentives?

3 Correct Answers

What is your classification?

Bar chart with y-axis labeled "Frequency" ranging from 0.0 to 12.5. The x-axis shows "Junior" (frequency 7) and "Senior" (frequency 14).

What is your classification?

Bar Charts of the Posttest Results

How Much Did the House of Representatives Approve?

10 Correct Answers

How Much Did the Senate Approve?

How Much Did the Senate Approve?

13 Correct Answers

How Many Republican Representatives voted in Favor?

13 Correct Answers

How Many Republican members of Congress voted in Favor?
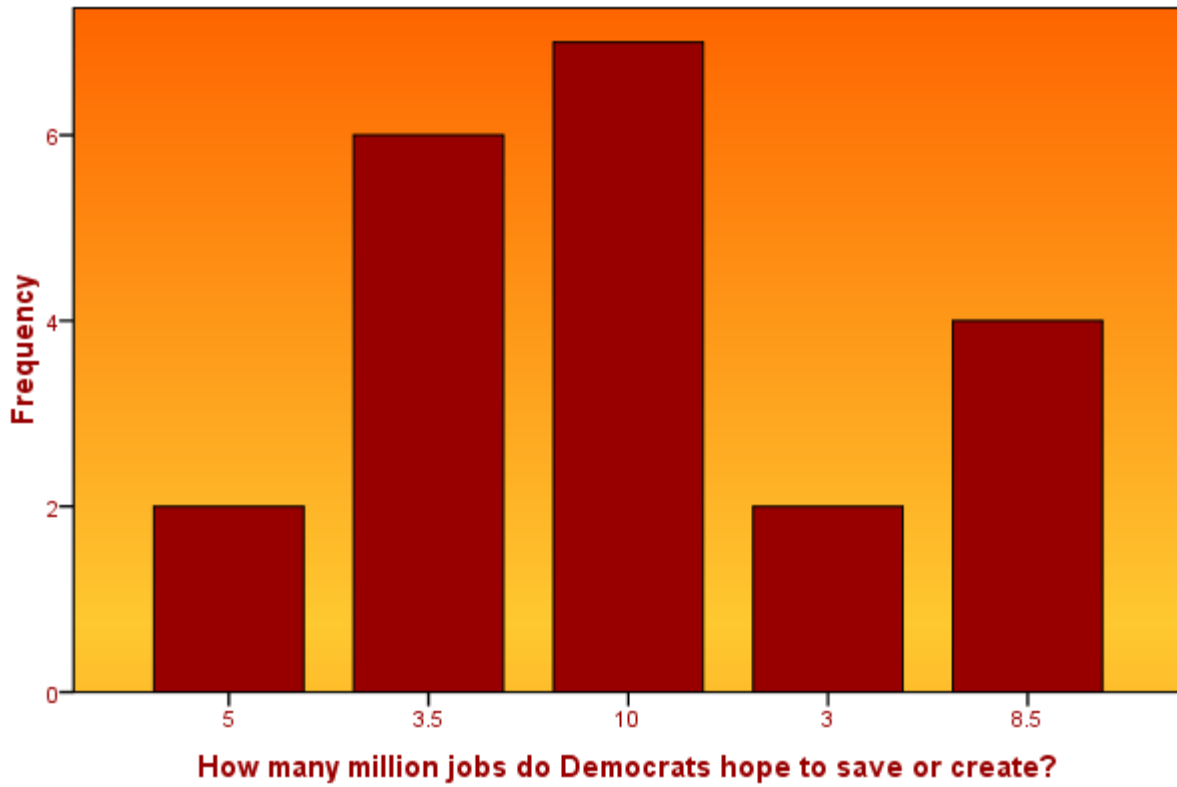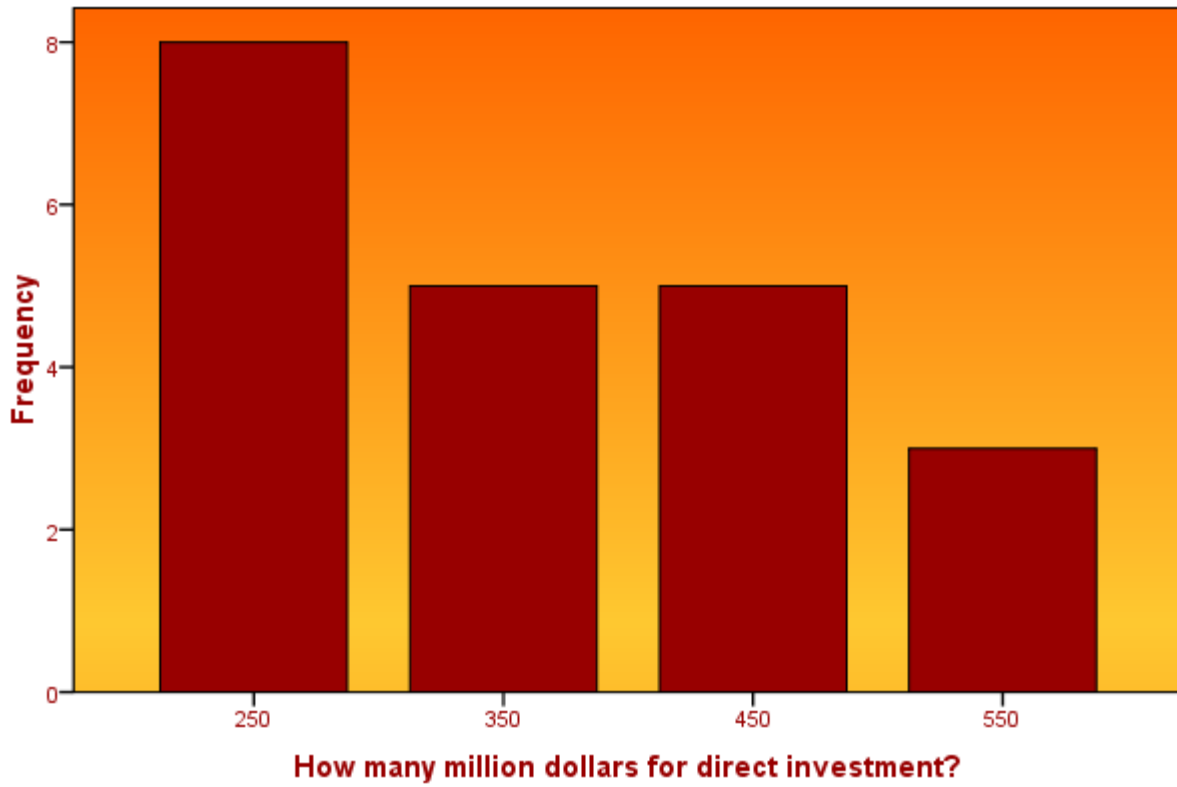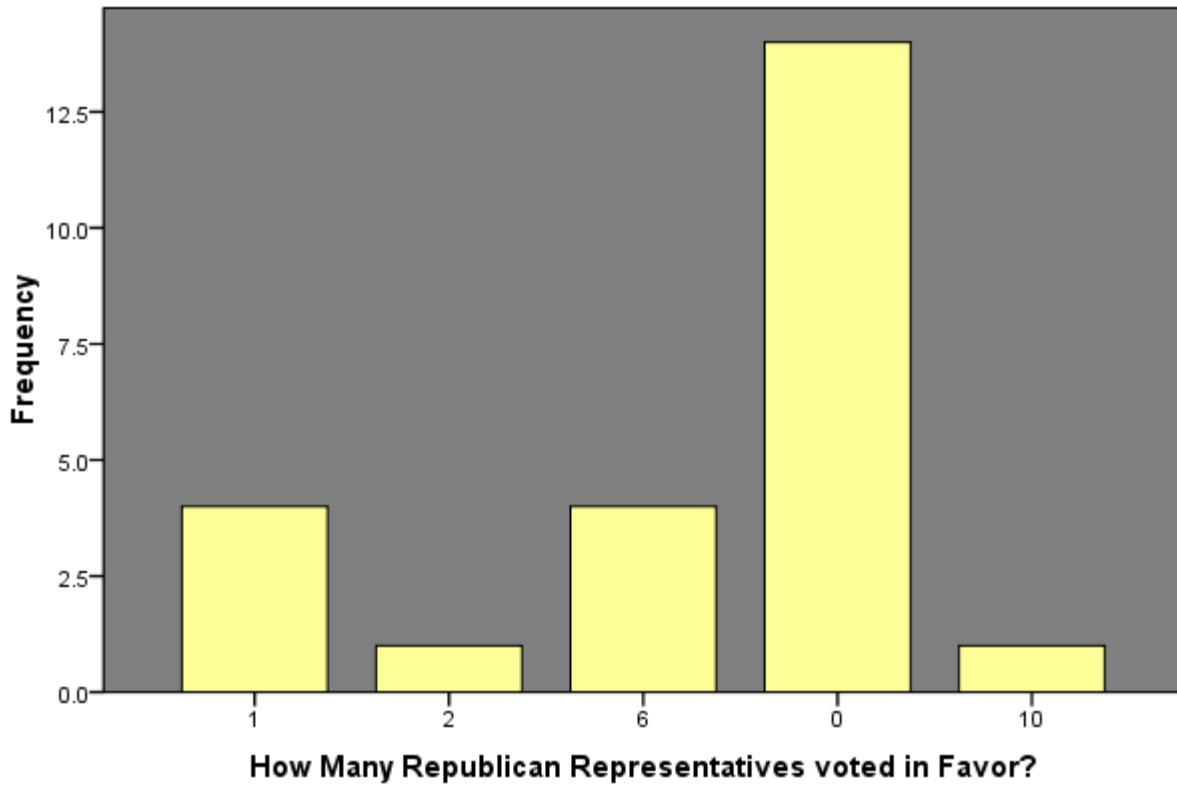

How Many Republican members of Congress voted in Favor?

7 Correct Answers
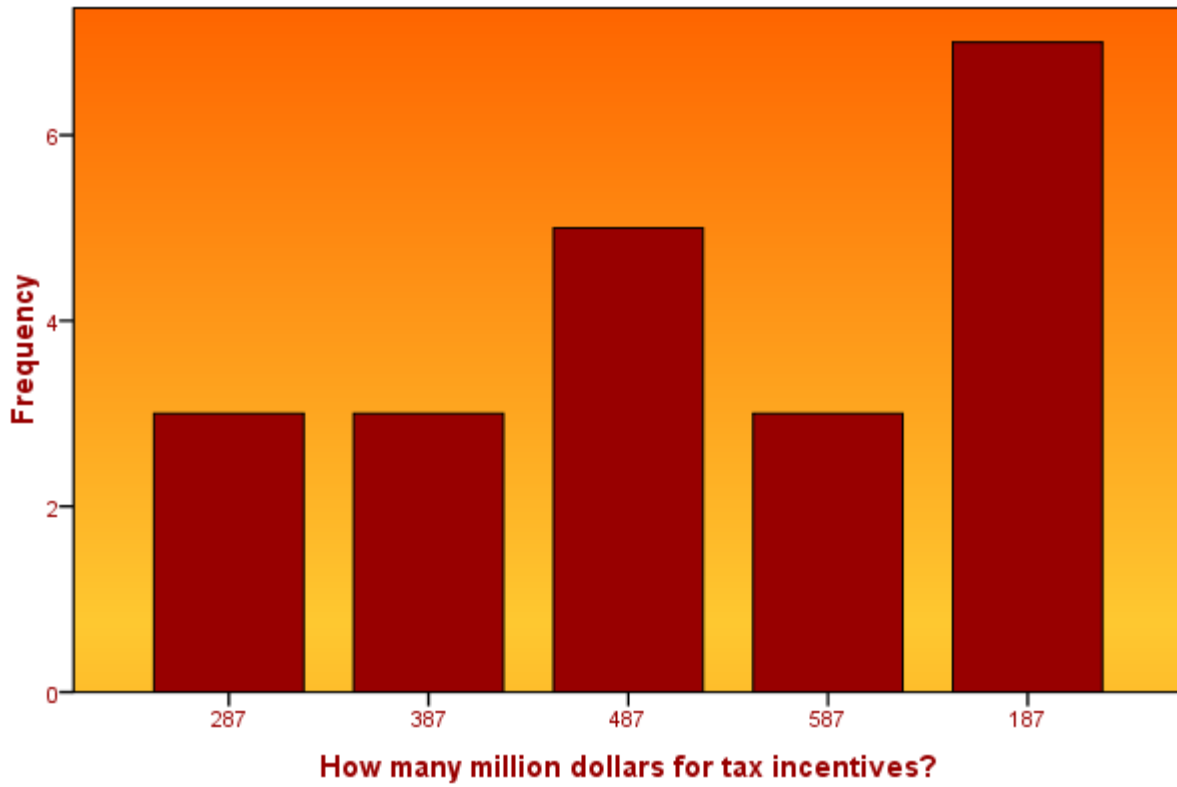
How many million jobs do Democrats hope to save or create?
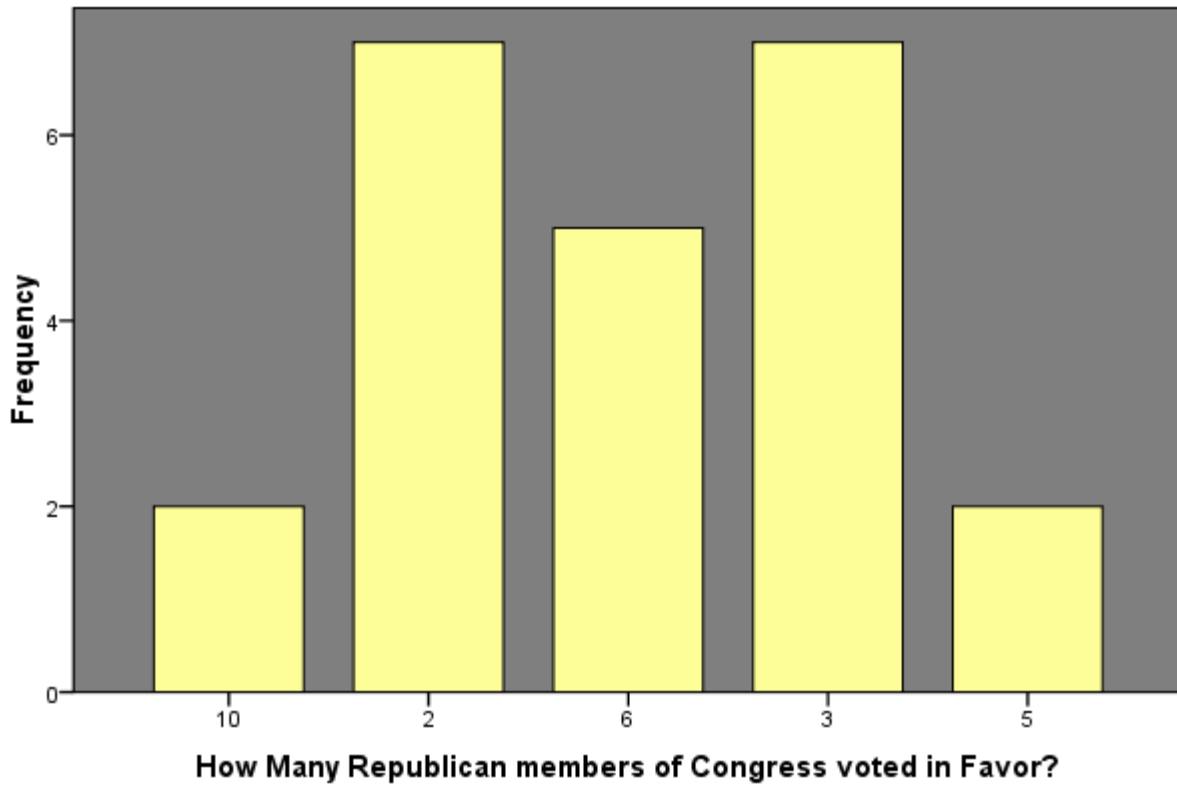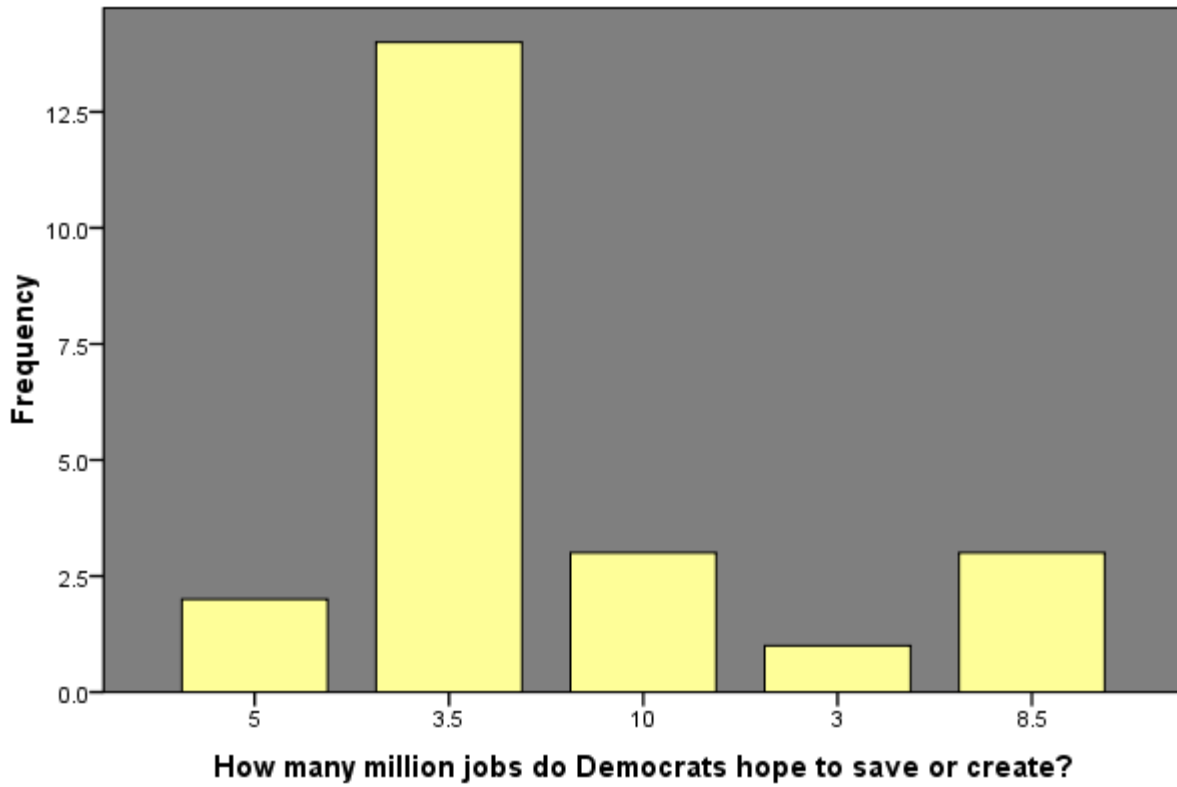
How many million jobs do Democrats hope to save or create?

13 Correct Answers
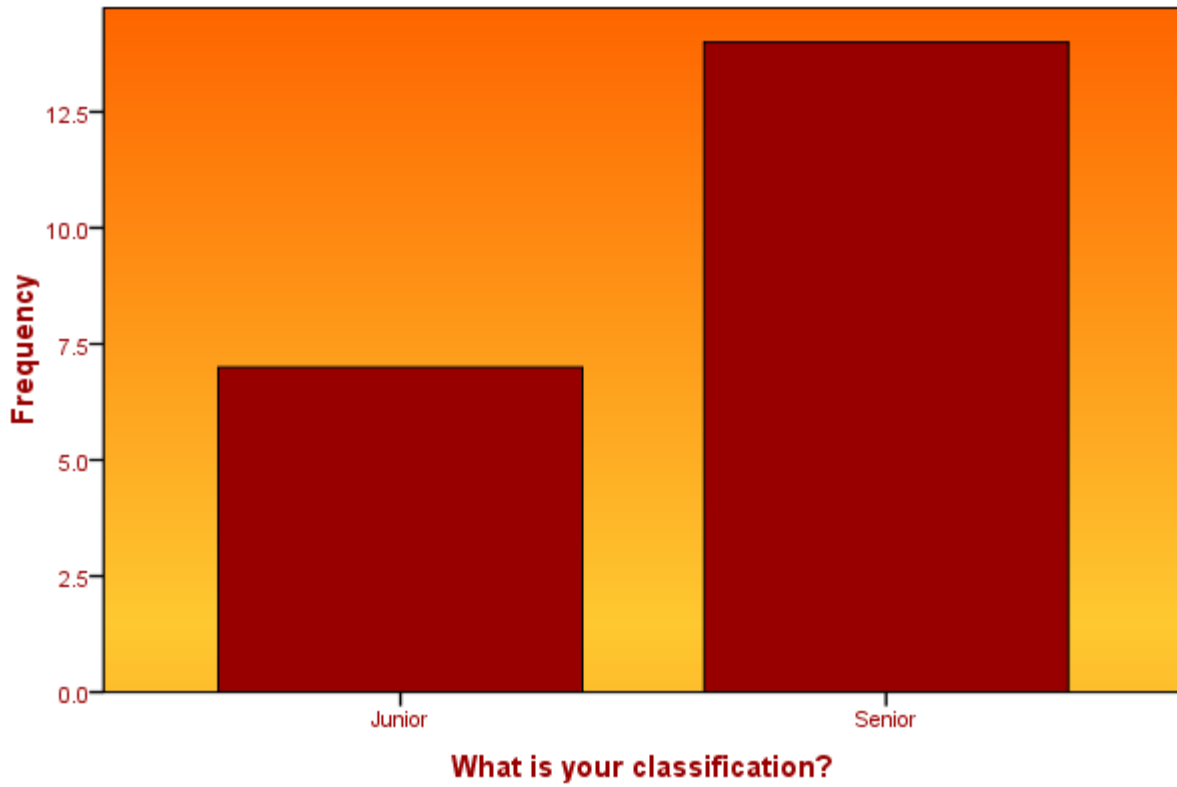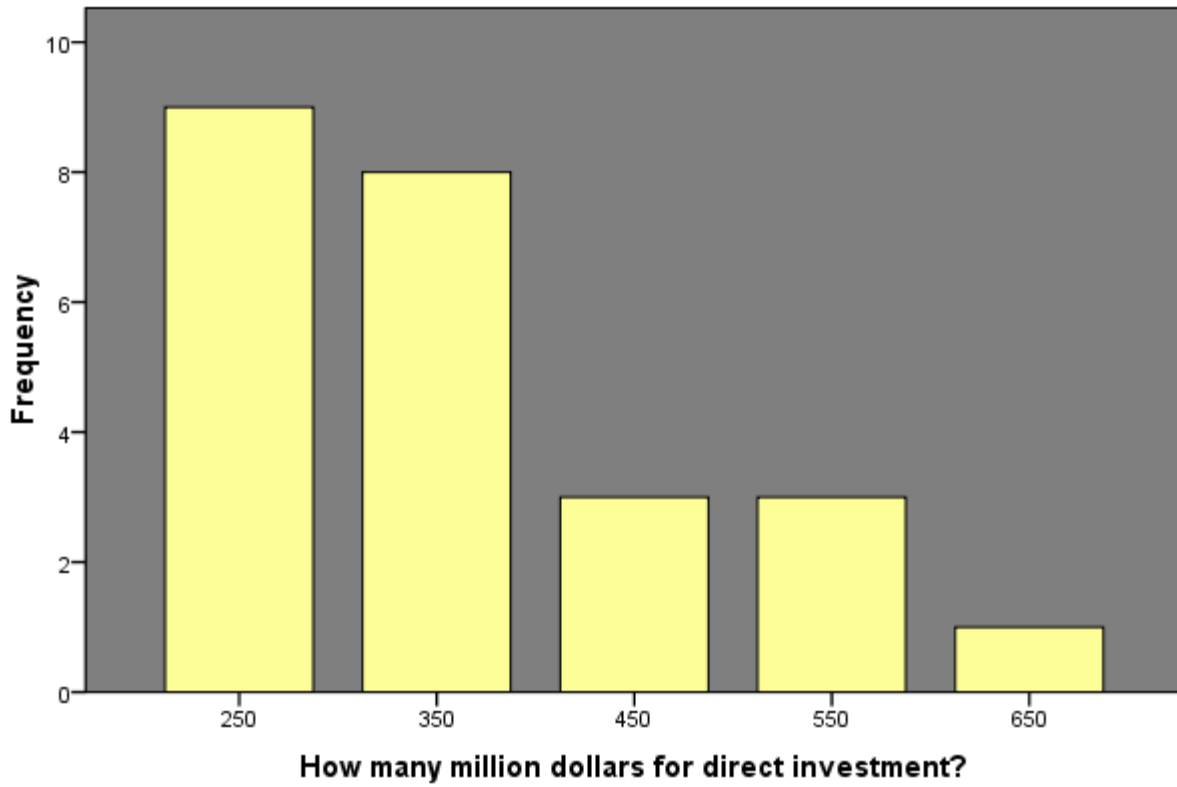
How many million dollars for direct investment?

3 Correct Answers
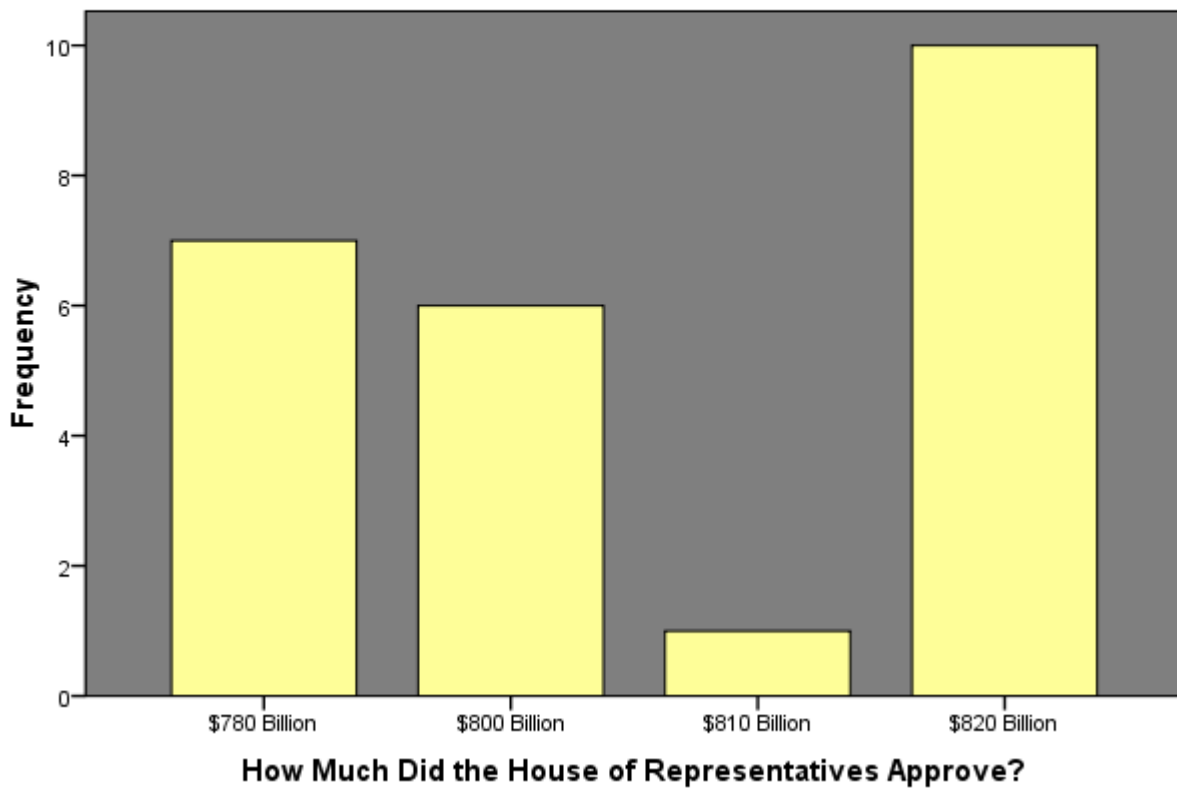
How many million dollars for tax incentives?

How many million dollars for tax incentives?
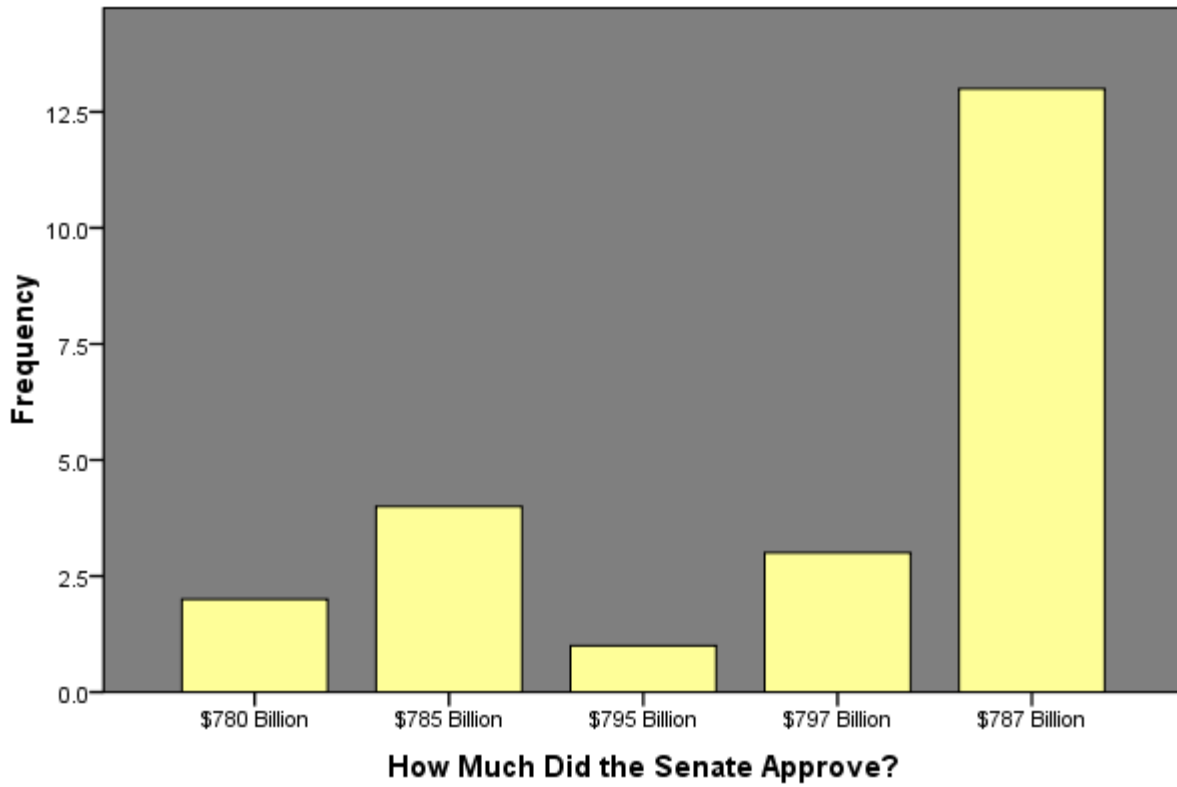
3 Correct Answers
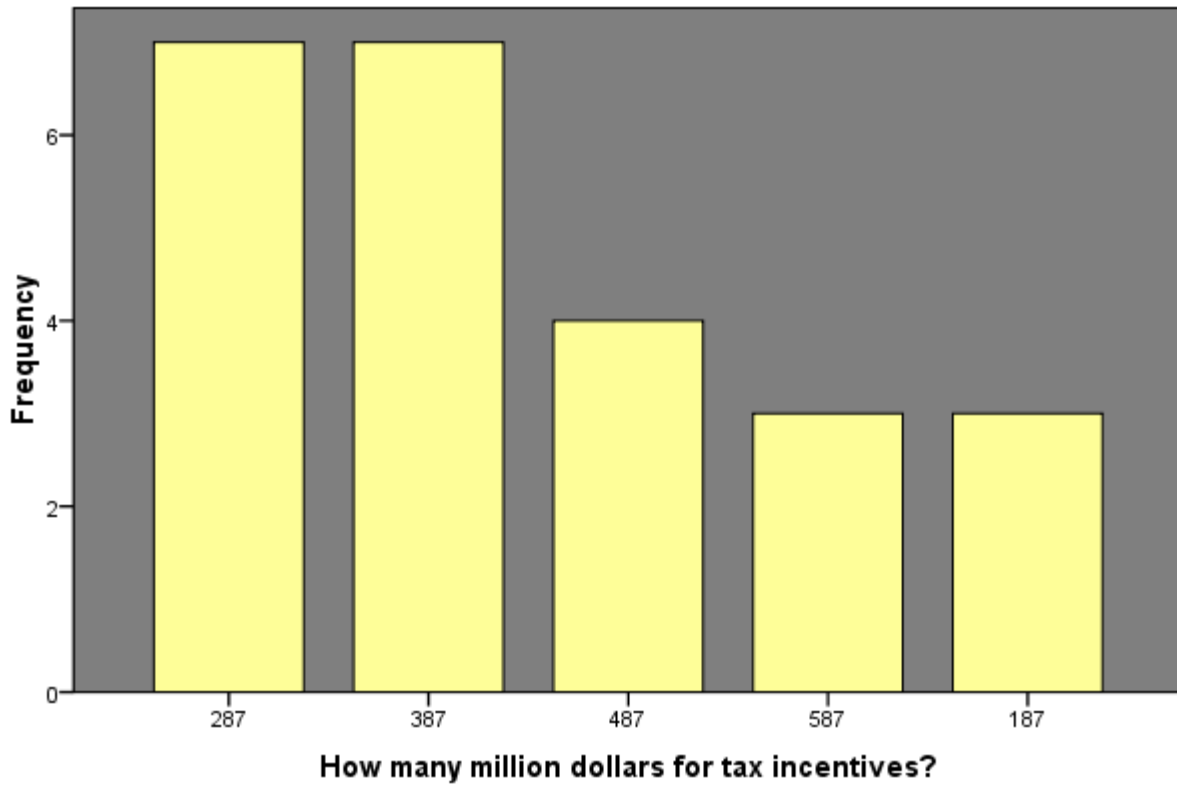
What is your classification?

What is your classification?
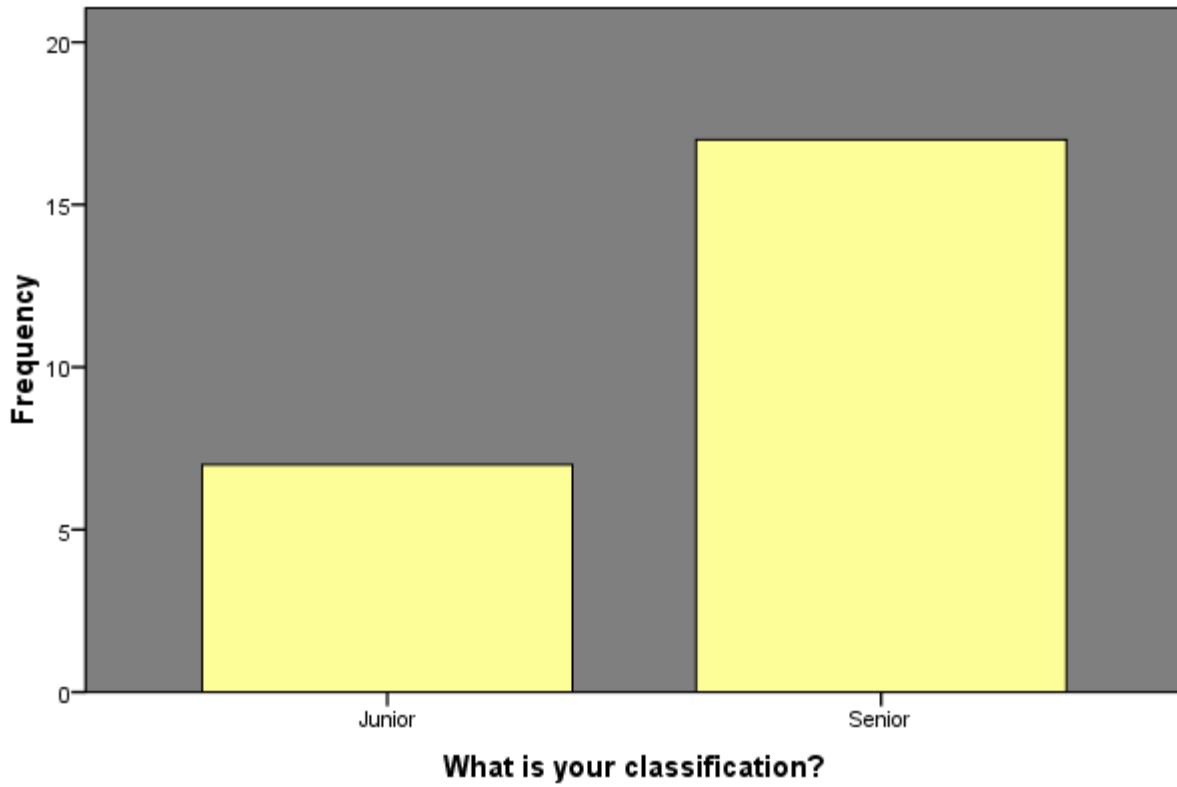
This was the Assessment Instrument that the students completed:

What was your role in this organization of material learning exercise?

a	b	c	d	e
Recorder	Leader	Contributor	Bystander	other

How actively involved were you?

a	b	c
Very active	Slightly active	Not active at all

How did you do on the pretest?

a	b	c	d
Not very well	Okay	Probably knew most of the answers	Aced it easily

How did you feel about the pretest?

a	b	c	d	e
Enjoyed it	It was okay	Neutral	Slightly Uncomfortable	Hated every second

How did you do on the posttest?

a	b	c	d
Not very well	Okay	Probably knew most of the answers	Aced it easily

How did you feel about the posttest?

a	b	c	d	e
Enjoyed it	It was okay	Neutral	Slightly Uncomfortable	Hated every second

These are the Bar Charts of the Assessment Results
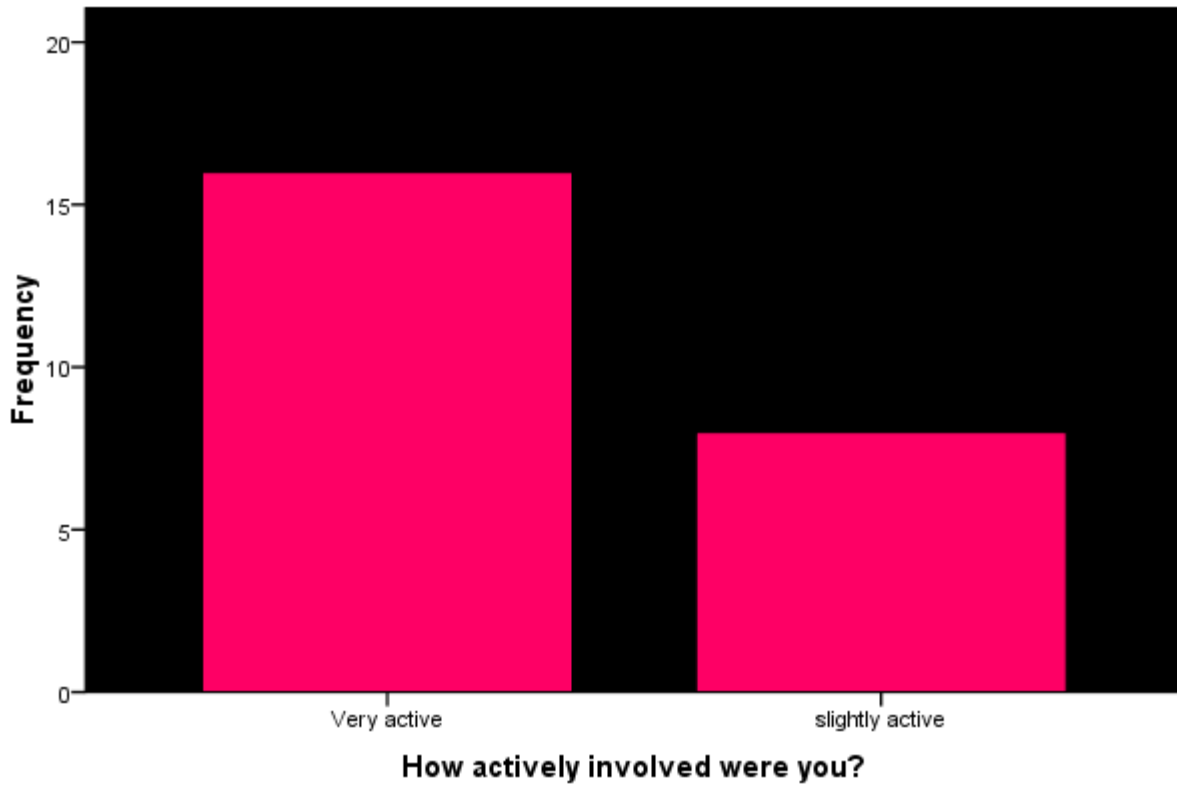
What was your role in this educational endeavor?I

What was your role in this educational endeavor?I

How actively involved were you?

How actively involved were you?

How did you do on the Pretest?
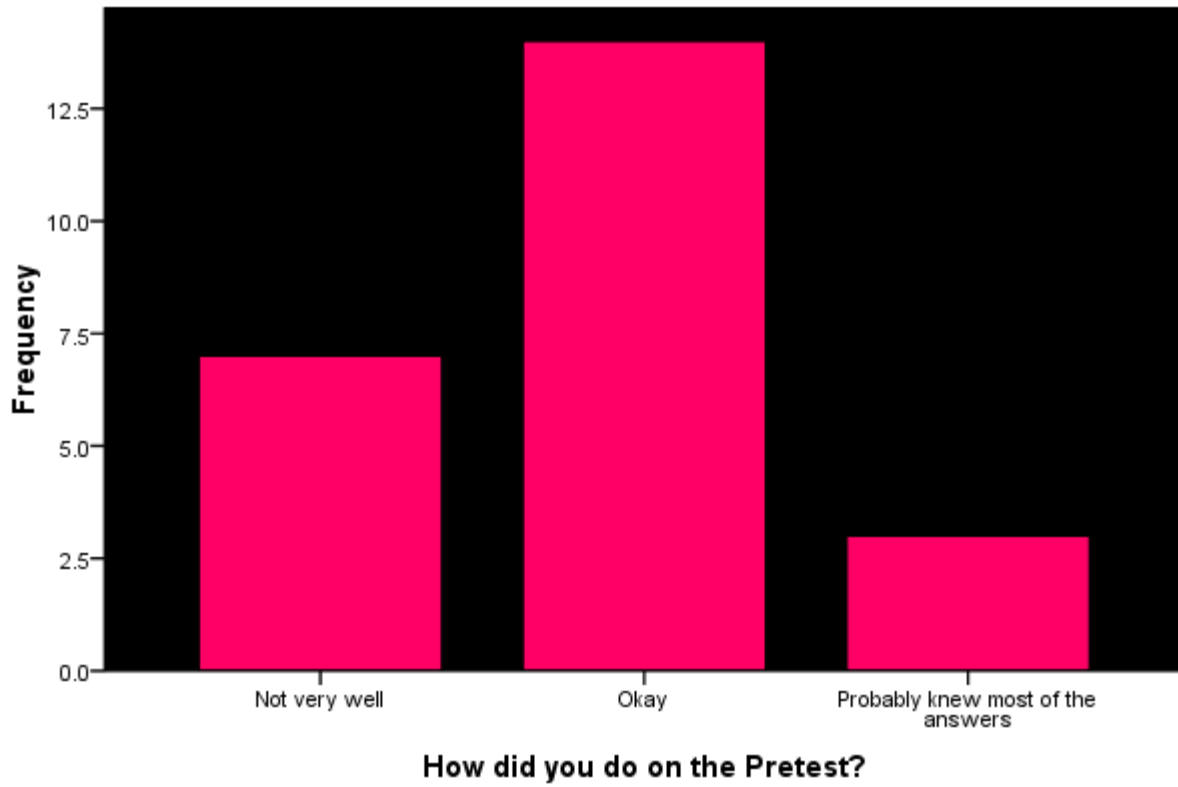
How did you do on the Pretest?

How did you feel about the Pretest?

How did you feel about the Pretest?

How did you do on the Posttest?

How did you do on the Posttest?
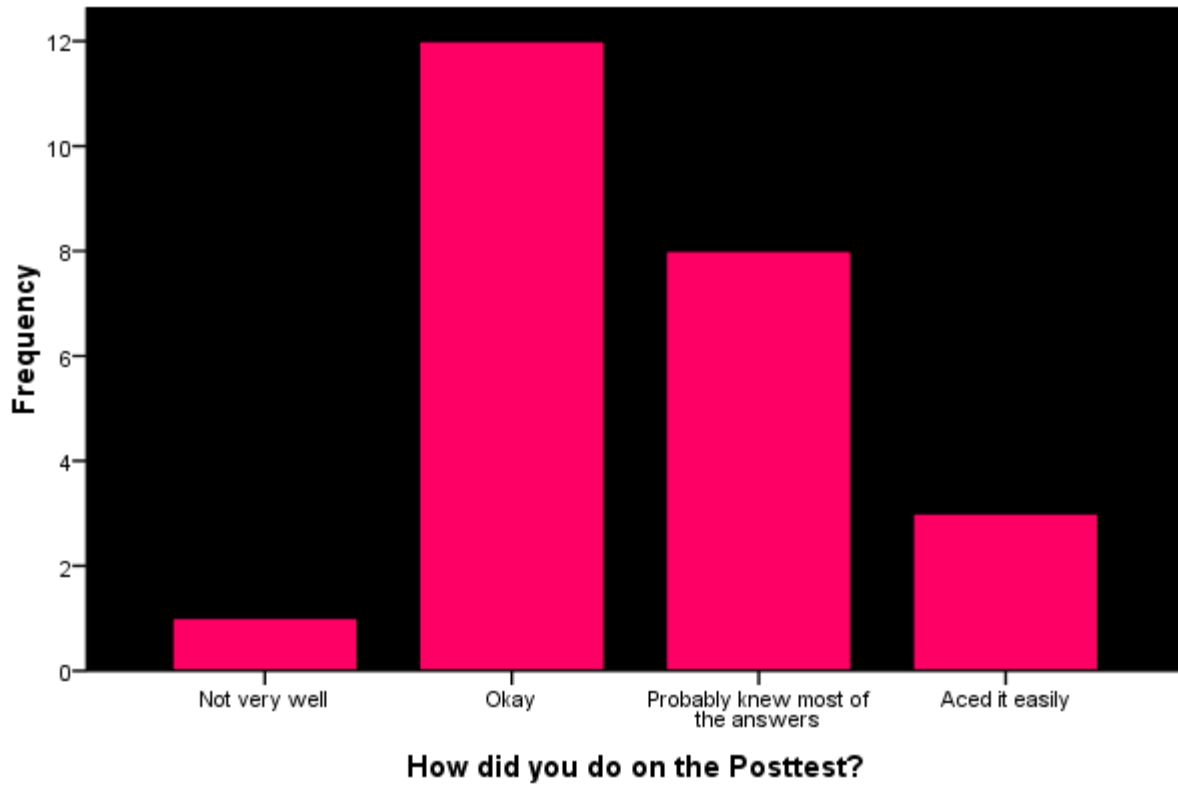
How did you feel about the posttest?
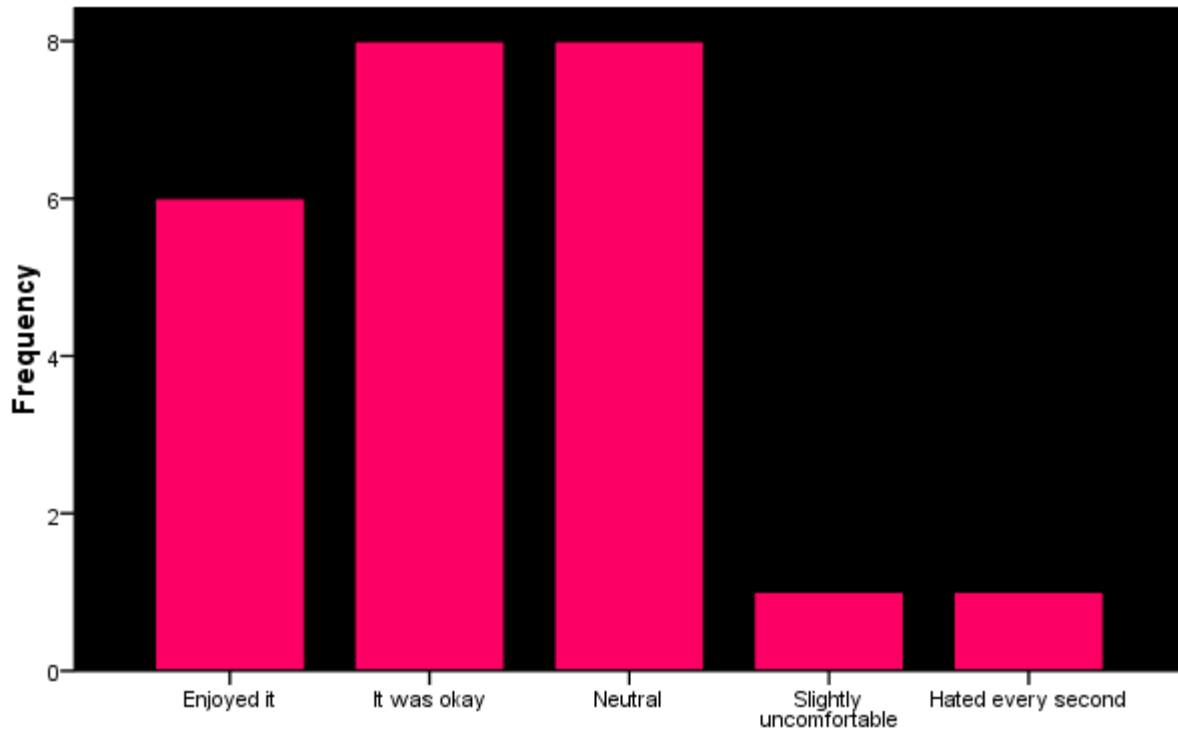
How did you feel about the posttest?

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Appendix

1. The Explanations of the Economic Recovery Plan.

2. The Pretest

3. The Posttest

4. The student assessment of learning instrument.

THE EXPLANATIONS OF THE ECONOMIC RECOVERY PLAN.

A nearly $820 billion stimulus package passed the House of Representatives Wednesday without a single Republican vote.

The vote was 244-188, with 11 Democrats crossing party lines and opposing the measure.

Cantor said that Republicans objected to what they saw as excess spending in the bill. "I think we demonstrated here that the kind of bill they put together without any input from us was not a stimulus bill. You can call it a safety net bill, a relief bill. It was a spending bill," he said.

Asked by the Huffington Post what spending provisions Republicans would support, Cantor said, "I think that if you have infrastructure programs that are meaningful, impactful, and put jobs back into place immediately within the first twelve months, you have a legitimate case for that to be a stimulus."

The stimulus plan provides some $550 billion in direct investment for modernizing infrastructure, expanding broadband, and improving health care delivery systems. Funding is also aimed at shoring up state and local budgets that have gone deeply into the red, preventing layoffs of state workers.

The U.S. Congress, handing President Barack Obama a major legislative victory, approved on Friday a $787 billion stimulus bill that aims to rush emergency government spending and tax cuts to a nation in the grip of a severe recession.

An earlier Senate version of the bill passed the 61-37. In that vote, as with today's, the only Republicans to support the bill were Sen. Susan Collins, R-Maine, Sen. Olympia Snowe, R-Maine, and Sen. Arlen Specter, R-Pa.

Democrats hope to save or create 3.5 million jobs.

But the Democratic president, in office only since January 20, failed in his efforts to win over Republicans, who are a minority in Congress. Not a single House

Republican voted for one of the biggest single spending bills in the nation's history and only three Republican senators backed it.

Republicans argued unsuccessfully for less government spending and more tax cuts.

The final plan is split into 36 percent for tax cuts and 64 percent in spending and other provisions. That was close to the 40/60 split Obama had sought in his effort to jolt the economy, which he has warned could become a "catastrophe" without rapid government intervention.

Senate Republican leader Mitch McConnell complained the bill "is unlikely to have much stimulative effect." He said it could be just the beginning of a Democratic spending spree in which Obama might seek $50 billion to help avert some home mortgage foreclosures and possibly hundreds of billions of dollars more to dig the financial sector from its crisis.

The massive new government spending will add significantly to federal budget deficits already shattering records.

According to the nonpartisan Congressional Budget Office, the stimulus bill will increase next year's deficit alone by nearly $400 billion.

The Democrats' quest for a new economic stimulus bill -- on top of the $162 billion one enacted a year ago -- actually began last July, when House leaders started crafting a much smaller measure of around $60 billion.

To win final passage, a group of Senate moderates crafted a compromise that shaved some of the tax-cut and spending provisions, finally arriving at the $787 billion bill, with most of the spending this year and next.

The final package includes about $500 billion in spending and money for social programs like the Medicaid health insurance program for the poor.

It has about $287 billion in tax cuts that include small tax incentives to spur home and automobile sales as well as business tax deductions.

Individuals would get a refundable tax credit championed by Obama of up to $400 per individual and $800 for couples in 2009 and 2010. It is phased out for

individuals with adjusted incomes of over $75,000 and couples with incomes over $150,000.

The measure includes almost $54 billion to help states with their budget deficits and to modernize schools, $27.5 billion for highway projects, $8.4 billion for public transportation and $9.3 billion for Amtrak and high-speed rail service.

The final agreement also included limits on compensation for senior executives of companies receiving government aid from a $700 billion financial bailout, including restrictions on bonuses.

THE PRETEST

How much did the House of Representatives Approve?

a	b	c	d	e
$780 Billion	$800 Billion	$810 Billion	$820 Billion	$830 Billion

How much did the Senate Approve?

a	b	c	d	e
$780 Billion	$785 Billion	$795 Billion	$797 Billion	$787 Billion

How many Republican Representatives voted in favor?

a	b	c	d	e
1	2	6	0	10

How many Republican members of Congress voted in favor?

a	b	c	d	e
10	2	6	3	5

How many million Jobs do Democrats hope to save or create?

a	b	c	d	e
5	3.5	10	3	8.5

The plan provides how many billion Dollars for direct investment?

a	b	c	d	e
250	350	450	550	650

The plan provides how many billion Dollars for tax incentives?

a	b	c	d	e
287	387	487	587	187

Your Classification?

a	b	c	d
Freshman	Sophomore	Junior	Senior

THE POSTTEST

How much did the House of Representatives Approve?

a	b	c	d	e
$780 Billion	$800 Billion	$810 Billion	$820 Billion	$830 Billion

How much did the Senate Approve?

a	b	c	d	e
$780 Billion	$785 Billion	$795 Billion	$797 Billion	$787 Billion

How many Republican Representatives voted in favor?

a	b	c	d	e
1	2	6	0	10

How many Republican members of Congress voted in favor?

a	b	c	d	e
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The plan provides how many billion Dollars for tax incentives?

a	b	c	d	e
287	387	487	587	187

Your Classification?

a	b	c	d
Freshman	Sophomore	Junior	Senior

Assessment of Inquiry Guided Learning Methods Instrument

What was your role in this organization of material learning exercise?

a	b	c	d	e
Recorder	Leader	Contributor	Bystander	other

How actively involved were you?

a	b	c
Very active	Slightly active	Not active at all

How did you do on the pretest?

a	b	c	d
Not very well	Okay	Probably knew most of the answers	Aced it easily

How did you feel about the pretest?

a	b	c	d	e
Enjoyed it	It was okay	Neutral	Slightly Uncomfortable	Hated every second

How did you do on the posttest?

a	b	c	d
Not very well	Okay	Probably knew most of the answers	Aced it easily

How did you feel about the posttest?

a	b	c	d	e
Enjoyed it	It was okay	Neutral	Slightly Uncomfortable	Hated every second