

# Who invented Calculus?

## April 2016

There has been great controversy over the years as to who is the real inventor of Calculus. This controversy may soon come to an end with your help. You will be asked to research the controversy and then choose who you believe invented Calculus. Then teams will be formed and a debate will be planned to finally put the controversy to an end.

Part 1 – Individual Research - use the document on Google classroom

Quick Look: (2)

1. Come up with who you think are the top 5 contenders for the crown of Inventor of Calculus

In Depth Look: (12) Develop a briefing/point paper to include the following information:

1. 7 reasons why Isaac Newton is the true inventor of Calculus
2. 7 reasons why Gottfried Leibniz is the true inventor of Calculus
3. 5 reasons why Isaac Newton is not the inventor of Calculus
4. 5 reasons why Gottfried Leibniz is not the inventor of Calculus

\*List your supporting documentation for each reason along with your source. Must have at least 1 offline source for each contender.

Timeline: (3)

1. Generate a timeline of the important dates in the invention of Calculus

Part 2 – Team Presentation

Develop a briefing using PowerPoint to include the following information:

1. 10 reasons why your contender is the true inventor of Calculus
2. 10 reasons why others are not the inventors of Calculus
3. A timeline of the important dates in this debate
4. How did your inventor influence the Calculus we use today
5. Documentation of your sources

Part 3 – Debate – each member of the debate team must present some type of evidence

10 minutes for presentation of claim for \_\_\_\_\_

10 minutes for presentation of claim for \_\_\_\_\_

5 minutes for rebuttal for \_\_\_\_\_

5 minutes for rebuttal for \_\_\_\_\_

15 minutes for questions

\*\*Mr. Duhrkopf will decide who is the “Inventor of Calculus.” based on the arguments presented by each group\*\*

Timeline

Apr 20/22: Project Introduction

April 25: Quick Look due

April 28: In Depth Look briefing due, Teams formed and debate preparation begins

May 3 : PowerPoint brief due to Mr. Duhrkopf

May 3,4 : Debate Days!

Grading

Part 1: 17 pts

Part 2: 10 pts

Part 3: 5 pts



# Who invented Calculus?

## March 2015

There has been great controversy over the years as to who is the real inventor of Calculus. This controversy may soon come to an end with your help. You will be asked to research the controversy and then choose who you believe invented Calculus. Then teams will be formed and a debate will be planned to finally put the controversy to an end.

Part 1 – Individual Research - use the document on Google classroom

In Depth Look: Develop a briefing/point paper to include the following information:

5. 7 reasons why Isaac Newton is the true inventor of Calculus
6. 7 reasons why Gottfried Leibniz is the true inventor of Calculus
7. 5 reasons why Isaac Newton is not the inventor of Calculus
8. 5 reasons why Gottfried Leibniz is not the inventor of Calculus

List your supporting documentation for each reason along with your source.

Part 2 – Team Presentation

Develop a briefing using PowerPoint to include the following information:

1. 10 reasons why your contender is the true inventor of Calculus
2. 10 reasons why others are not the inventors of Calculus
3. A timeline of the important dates in this debate
4. How did your inventor influence the Calculus we use today
5. Documentation of your sources

Part 3 – Debate – each member of the debate team must present some type of evidence

10 minutes for presentation of claim for \_\_\_\_\_  
10 minutes for presentation of claim for \_\_\_\_\_  
5 minutes for rebuttal for \_\_\_\_\_  
5 minutes for rebuttal for \_\_\_\_\_  
15 minutes for questions

\*\*Mr. Duhrkopf will decide who is the “Inventor of Calculus.” based on the arguments presented by each group\*\*

Timeline

- : Project Introduction
- : In Depth Look briefing due, Teams formed and debate preparation begins
- : PowerPoint brief due to Mr. Duhrkopf
- : Debate Days!

Grading

Part 1: 10 pts  
Part 2: 10 pts  
Part 3: 5 pts



# Who invented Calculus?

## February 2014

There has been great controversy over the years as to who is the real inventor of Calculus. This controversy may soon come to an end with your help. You will be asked to research the controversy and then choose who you believe invented Calculus. Then teams will be formed and a debate will be planned to finally put the controversy to an end.

### Part 1 – Individual Research

Quick Look:

2. Come up with who you think are the top 5 contenders for the crown of Inventor of Calculus

In Depth Look: Develop a briefing/point paper to include the following information:

9. 5 reasons why \_\_\_\_\_ is the true inventor of Calculus
10. 5 reasons why \_\_\_\_\_ is the true inventor of Calculus
11. 5 reasons why \_\_\_\_\_ is the true inventor of Calculus
12. 5 reasons why \_\_\_\_\_ is not the inventor of Calculus
13. 5 reasons why \_\_\_\_\_ is not the inventor of Calculus
14. 5 reasons why \_\_\_\_\_ is not the inventor of Calculus

List your supporting documentation for each reason along with your source.

### Part 2 – Team Presentation

Develop a briefing using PowerPoint to include the following information:

1. 10 reasons why your contender is the true inventor of Calculus
2. 10 reasons why others are not the inventors of Calculus
3. A timeline of the important dates in this debate
4. How did your inventor influence the Calculus we use today
5. Documentation of your sources

Part 3 – Debate – each member of the debate team must present some type of evidence

10 minutes for presentation of claim for \_\_\_\_\_

10 minutes for presentation of claim for \_\_\_\_\_

5 minutes for rebuttal for \_\_\_\_\_

5 minutes for rebuttal for \_\_\_\_\_

15 minutes for questions

\*\*Mr. Duhrkopf will decide who is the “Inventor of Calculus.” based on the arguments presented by each group\*\*

### Timeline

- : Project Introduction
- : Quick Look
- : In Depth Look briefing due, Teams formed and debate preparation begins
- : PowerPoint brief due to Mr. Duhrkopf
- : Debate Days!

### Grading

Part 1: 50 pts

Part 2: 50 pts

Part 3: 25 pts



# Who invented Calculus?

## December 2012

There has been great controversy over the years as to who is the real inventor of Calculus. This controversy may soon come to an end with your help. You will be asked to research the controversy and then choose who you believe invented Calculus. Then teams will be formed and a debate will be planned to finally put the controversy to an end.

### Part 1 – Individual Research

Quick Look:

3. Come up with who you think are the top 5 contenders for the crown of Inventor of Calculus

In Depth Look: Develop a briefing/point paper to include the following information:

15. 5 reasons why \_\_\_\_\_ is the true inventor of Calculus
16. 5 reasons why \_\_\_\_\_ is the true inventor of Calculus
17. 5 reasons why \_\_\_\_\_ is the true inventor of Calculus
18. 5 reasons why \_\_\_\_\_ is not the inventor of Calculus
19. 5 reasons why \_\_\_\_\_ is not the inventor of Calculus
20. 5 reasons why \_\_\_\_\_ is not the inventor of Calculus

List your supporting documentation for each reason along with your source.

### Part 2 – Team Presentation

Develop a briefing using PowerPoint to include the following information:

1. 10 reasons why your contender is the true inventor of Calculus
2. 10 reasons why others are not the inventors of Calculus
3. A timeline of the important dates in this debate
4. How did your inventor influence the Calculus we use today
5. Documentation of your sources

Part 3 – Debate – each member of the debate team must present some type of evidence

10 minutes for presentation of claim for \_\_\_\_\_

10 minutes for presentation of claim for \_\_\_\_\_

5 minutes for rebuttal for \_\_\_\_\_

5 minutes for rebuttal for \_\_\_\_\_

15 minutes for questions

**\*\*Mr. Duhrkopf will decide who is the “Inventor of Calculus.” based on the arguments presented by each group\*\***

### Timeline

12-11 : Project Introduction

12-12 : Quick Look

12-14 : In Depth Look briefing due, Teams formed and debate preparation begins

12-17 : PowerPoint brief due to Mr. Duhrkopf

12-17 : Debate Days!

### Grading

Part 1: 50 pts

Part 2: 50 pts

Part 3: 25 pts



# Who invented Calculus?

## Spring 2012

There has been great controversy over the years as to who is the real inventor of Calculus. This controversy may soon come to an end with your help. You will be asked to research the controversy and then choose who you believe invented Calculus. Then teams will be formed and a debate will be planned to finally put the controversy to an end.

### Part 1 – Individual Research

Quick Look:

4. Come up with who you think are the top 5 contenders for the crown of Inventor of Calculus

In Depth Look: Develop a briefing/point paper to include the following information:

21. 5 reasons why \_\_\_\_\_ is the true inventor of Calculus
22. 5 reasons why \_\_\_\_\_ is the true inventor of Calculus
23. 5 reasons why \_\_\_\_\_ is the true inventor of Calculus
24. 5 reasons why \_\_\_\_\_ is not the inventor of Calculus
25. 5 reasons why \_\_\_\_\_ is not the inventor of Calculus
26. 5 reasons why \_\_\_\_\_ is not the inventor of Calculus

List your supporting documentation for each reason along with your source.

### Part 2 – Team Presentation

Develop a briefing using PowerPoint to include the following information:

1. 10 reasons why your contender is the true inventor of Calculus
2. 10 reasons why others are not the inventors of Calculus
3. A timeline of the important dates in this debate
4. How did your inventor influence the Calculus we use today
5. Documentation of your sources

Part 3 – Debate – each member of the debate team must present some type of evidence

10 minutes for presentation of claim for \_\_\_\_\_

10 minutes for presentation of claim for \_\_\_\_\_

5 minutes for rebuttal for \_\_\_\_\_

5 minutes for rebuttal for \_\_\_\_\_

15 minutes for questions

\*\*Mr. Duhrkopf will decide who is the “Inventor of Calculus.” based on the arguments presented by each group\*\*

### Timeline

- \_\_\_\_\_ : Project Introduction
- \_\_\_\_\_ : Quick Look
- \_\_\_\_\_ : In Depth Look briefing due, Teams formed and debate preparation begins
- \_\_\_\_\_ : PowerPoint brief due to Mr. Duhrkopf
- \_\_\_\_\_ : Debate Days!

### Grading

Part 1: 50 pts

Part 2: 50 pts

Part 3: 25 pts



# Who invented Calculus? Spring 2011

There has been great controversy over the years as to who is the real inventor of Calculus. This controversy may soon come to an end with your help. You will be asked to research the controversy and then choose who you believe invented Calculus. Then teams will be formed and a debate will be planned to finally put the controversy to an end.

## Part 1 – Individual Research

Quick Look:

5. Come up with who you think are the top 5 contenders for the crown of Inventor of Calculus

In Depth Look: Develop a briefing/point paper to include the following information:

27. 5 reasons why \_\_\_\_\_ is the true inventor of Calculus
28. 5 reasons why \_\_\_\_\_ is the true inventor of Calculus
29. 5 reasons why \_\_\_\_\_ is the true inventor of Calculus
30. 5 reasons why \_\_\_\_\_ is not the inventor of Calculus
31. 5 reasons why \_\_\_\_\_ is not the inventor of Calculus
32. 5 reasons why \_\_\_\_\_ is not the inventor of Calculus

List your supporting documentation for each reason along with your source.

## Part 2 – Team Presentation

Develop a briefing using PowerPoint to include the following information:

1. 10 reasons why your contender is the true inventor of Calculus
2. 10 reasons why others are not the inventors of Calculus
3. A timeline of the important dates in this debate
4. How did your inventor influence the Calculus we use today
5. Documentation of your sources

Part 3 – Debate – each member of the debate team must present some type of evidence

10 minutes for presentation of claim for \_\_\_\_\_

10 minutes for presentation of claim for \_\_\_\_\_

5 minutes for rebuttal for \_\_\_\_\_

5 minutes for rebuttal for \_\_\_\_\_

15 minutes for questions

\*\*Mr. Duhrkopf will decide who is the “Inventor of Calculus.” based on the arguments presented by each group\*\*

## Timeline

- \_\_\_\_\_ : Project Introduction
- \_\_\_\_\_ : Quick Look
- \_\_\_\_\_ : In Depth Look briefing due, Teams formed and debate preparation begins
- \_\_\_\_\_ : PowerPoint brief due to Mr. Duhrkopf
- \_\_\_\_\_ : Debate Days!

## Grading

Part 1: 50 pts

Part 2: 50 pts

Part 3: 25 pts



# Who invented Calculus? Spring 2009

## Newton vs. Leibniz



There has been great controversy over the years as to who is the real inventor of Calculus. This controversy may soon come to an end with your help. You and your peers will be assigned one of the 2 claimants and will be responsible for proving the claim of your client. We will use the debate format to decide the winning team.

### Day 1

2 minutes for opening arguments for Newton  
2 minutes for opening arguments for Leibniz  
10 minutes for presentation of claim for Newton  
10 minutes for presentation of claim for Leibniz  
5 minutes for rebuttal for Newton  
5 minutes for rebuttal for Leibniz  
10 minutes for point/counterpoint

### Day 2

10 minutes for questions by the panel  
5 minutes for final claim for Newton  
5 minutes for final claim for Leibniz

\*\*A panel will decide who is the “Inventor of Calculus.”\*\*

### Team Responsibilities

- Each team will consist of 7-8 individuals.
- Each individual must be assigned a specific area of responsibility.
- All team members are responsible for research and development of the case.
- Each member of the debate team must present some type of evidence.
- PowerPoint briefing of your case due the day before the debate. (file and printout)
- PowerPoint must include a timeline of the important dates in this debate.
- Strictly adhere to the time limits. Penalties will be assessed for violations.
- Document and verify sources of information.

### Timeline

Mar. 17<sup>th</sup> : Project Introduction  
Mar. 18<sup>th</sup> – 24<sup>th</sup> : Project research and development  
Mar. 24<sup>th</sup> : PowerPoint brief due to Mr. Duhrkopf  
Mar. 25<sup>th</sup> and 26<sup>th</sup> : Debate Day!

### Grading

50 test pts for the individual grade consisting of:

- Individual performance in your area of responsibility
- Completion of personal and group evaluation sheet

Extra credit may be given for being selected as the “Inventor of Calculus” for the whole group



# Who invented Calculus? Fall 2007

## Newton vs. Leibniz



There has been great controversy over the years as to who is the real inventor of Calculus. This controversy may soon come to an end with your help. You and your peers will be assigned one of the 2 claimants and will be responsible for proving the claim of your client. We will use the debate format to decide the winning team.

### Day 1

2 minutes for opening arguments for Newton  
2 minutes for opening arguments for Leibniz  
10 minutes for presentation of claim for Newton  
5 minutes for cross-examination by Leibniz  
5 minutes for rebuttal for Newton  
10 minutes for presentation of claim for Leibniz  
5 minutes for cross-examination by Newton  
5 minutes for rebuttal for Leibniz

### Day 2

10 minutes for questions by the panel  
5 minutes for final claim for Newton  
5 minutes for final claim for Leibniz

\*\*A panel will decide who is the “Inventor of Calculus.”\*\*

### Team Responsibilities

- Each team will consist of 4-5 individuals.
- Each individual must be assigned a specific area of responsibility.
- All team members are responsible for research and development of the case.
- Each member of the debate team must present some type of evidence.
- The cross-examination will be in a question/answer format.
- PowerPoint briefing of your case due the day before the debate. (file and printout)
- PowerPoint must include a timeline of the important dates in this debate.
- Strictly adhere to the time limits. Penalties will be assessed for violations.
- Document and verify sources of information.

### Timeline

Nov. 8<sup>th</sup> : Project Introduction  
Nov. 9<sup>th</sup> – 15<sup>th</sup> : Project research and development  
Nov. 15<sup>th</sup> : PowerPoint brief due to Mr. Duhrkopf  
Nov. 16<sup>th</sup> : Debate Day!

### Grading

50 test pts for the individual grade consisting of:

- Individual performance in your area of responsibility
- Completion of personal and group evaluation sheet

Extra credit may be given for being selected as the “Inventor of Calculus” for the whole group

# Who invented Calculus? Fall 2006

Newton vs. Leibniz



There has been great controversy over the years as to who is the real inventor of Calculus. This controversy will soon come to an end with your help. You and your peers will be assigned one of the 2 claimants and will be responsible for proving the claim of your client. We will use the debate format to decide the winning team.

- 2 minutes for opening arguments for Newton
- 2 minutes for opening arguments for Leibniz
- 10 minutes for presentation of claim for Newton
- 5 minutes for cross-examination by Leibniz
- 10 minutes for presentation of claim for Leibniz
- 5 minutes for cross-examination by Newton
- 5 minutes for final claim for Newton
- 5 minutes for final claim for Leibniz
- 5 minutes for questions by the 3-person panel

\*\*A 3-person panel will decide who is the “Inventor of Calculus.”\*\*

## Team Responsibilities

- Each team will consist of 7 individuals. 5 members for the debate and 2 Power Pointers’.
- Each individual must be assigned a specific area of responsibility.
- All team members are responsible for research and development of the case.
- Each member of the debate team must present some type of evidence.
- The cross-examination will be in a question/answer format.
- PowerPoint briefing of your case due the day before the debate. (file and printout)
- PowerPoint must include a timeline of the important dates in this debate.
- Strictly adhere to the time limits. Penalties will be assessed for violations.
- Document and verify sources of information.

## Timeline

- Nov. 6<sup>th</sup> : Project Introduction
- Nov. 7<sup>th</sup> – 11<sup>th</sup> : Project research and development
- Nov. 12<sup>th</sup> : PowerPoint brief due to Mr. Duhrkopf
- Nov. 13<sup>th</sup> : Debate Day!

## Grading

50 test pts for the individual grade consisting of:

- Individual performance in your area of responsibility
- Completion of personal and group evaluation sheet

5 test pts extra credit for being selected as the “Inventor of Calculus” for the whole group

# Who invented Calculus? Fall 2005

## Newton vs. Leibniz



There has been great controversy over the years as to who is the real inventor of Calculus. This controversy will soon come to an end with your help. You and your peers will be assigned one of the 2 claimants and will be responsible for proving the claim of your client. The format for this project will be a trial/debate and will proceed as follows:

- 2 minutes for opening remarks for Newton
- 2 minutes for opening remarks for Leibniz
- 10 minutes for presentation of claim for Newton
- 5 minutes for cross-examination by Leibniz
- 10 minutes for presentation of claim for Leibniz
- 5 minutes for cross-examination by Newton
- 5 minutes for final claim for Newton
- 5 minutes for final claim for Leibniz

\*\*Mr. Duhrkopf and possibly a jury will be presiding over the trial/debate and will decide who is the “Inventor of Calculus”.

### Team Responsibilities

- Each team will consist of 6-7 individuals.
- Each individual must be assigned a specific area of responsibility. Areas that need to be assigned: lawyers, witnesses, developers, recorders, and Power Pointer's.
- All team members are responsible for research and development of the case.
- Potential witness list due to Mr. Duhrkopf at the end of the 3<sup>rd</sup> research day.
- PowerPoint briefing of your case. (When complete put into Mr. Duhrkopf's Calculus folder on Server-8)
- Complete evaluations on yourself and each member of your group.
- Strictly adhere to the time limits. Penalties will be assessed for violations.
- Document and verify sources of information.

### Timeline

- 3 class days for research and development
- 2 class days for the trial (1 trial each day)

### Grading

50 test pts for the individual grade consisting of:

- Individual performance in your area of responsibility
- Completion of personal and group evaluation sheet
- Average of the your peer grades

5 test pts extra credit for “Inventor of Calculus” for the whole group

**Newton**

Presentation of evidence:

Rebuttal:

Questions:

Closing arguments:

Presentation:

Overall comments:

**Leibniz**

Presentation of evidence:

Rebuttal:

Questions:

Closing arguments:

Presentation:

Overall comments:

**Newton**

Group members w/assignments:

- 1)
- 2)
- 3)
- 4)
- 5)

Opening remarks:

Presentation of evidence:

Cross-examination:

Rebuttal:

Questions:

Closing arguments:

PowerPoint:

Overall comments:

**Leibniz**

Group members w/assignments:

- 1)
- 2)
- 3)
- 4)
- 5)

Opening remarks:

Presentation of evidence:

Cross-examination:

Rebuttal:

Questions:

Closing arguments:

PowerPoint:

Overall comments:

## Personal and Group Evaluation

Name \_\_\_\_\_

1) What was your area of responsibility?

2) Did you feel you were able to make a contribution to the project?

3) What grade would you give yourself for this project and why?

4) Evaluate each member of your group on their performance of their duties. Score from 1(lowest) – 10(highest). Justify your grade.

Group member \_\_\_\_\_

Area of responsibility \_\_\_\_\_

Score \_\_\_\_\_

Justification:

Group member \_\_\_\_\_

Area of responsibility \_\_\_\_\_

Score \_\_\_\_\_

Justification:

Group member \_\_\_\_\_

Area of responsibility \_\_\_\_\_

Score \_\_\_\_\_

Justification:

Group member \_\_\_\_\_

Area of responsibility \_\_\_\_\_

Score \_\_\_\_\_

Justification:

Group member \_\_\_\_\_

Area of responsibility \_\_\_\_\_

Score \_\_\_\_\_

Justification:

Group member \_\_\_\_\_

Area of responsibility \_\_\_\_\_

Score \_\_\_\_\_

Justification:

5) What are your thoughts on this project? Likes, Dislikes, suggestions, etc...