

CLASS: Contradiction and Contraposition

Due Feb 9 at 11:59pm

Points 3

Questions 3

Time Limit None

Allowed Attempts Unlimited

Instructions

This CLASS assignment is a introduction to Contradiction and Contraposition.

You have multiple attempts in answering the question

Chapter 4 note <https://www.youtube.com/watch?v=L8LTE2xgm9g&list=PLiwEbczHeZcuf7VyebyKcVDqfViUkqfh&index=2>

[Take the Quiz Again](#)

Attempt History

	Attempt	Time	Score
KEPT	Attempt 2	4 minutes	3 out of 3
LATEST	Attempt 2	4 minutes	3 out of 3
	Attempt 1	2 minutes	0 out of 3

❗ Correct answers are hidden.

Score for this attempt: **3** out of 3

Submitted Feb 9 at 5:20pm

This attempt took 4 minutes.

Question 1

1 / 1 pts

The square of any odd integer has the form $8m + 1$ for some integer m . <https://www.youtube.com/watch?v=ITOJFGXB0u0&list=PLiwEbczHeZcuf7VyebyKcVDqfViUkqfh&index=123>


There is no greatest integer Proof <https://www.youtube.com/watch?>

[v=GKbYLSJMDAM&list=PLiWEbczHeZcuf7VyebyKcVDqfViUkqfh&index=1](https://www.youtube.com/watch?v=GKbYLSJMDAM&list=PLiWEbczHeZcuf7VyebyKcVDqfViUkqfh&index=1)

Method of Contradiction: There is no integer that is both even and odd. <https://www.youtube.com/watch?v=11RSBXQO6Vo&list=PLiWEbczHeZcuf7VyebyKcVDqfViUkqfh&index=12>

Method of Contraposition: If the Square of an Integer Is Even, Then the Integer Is Even <https://www.youtube.com/watch?v=7m4XtpKwjTc&list=PLiWEbczHeZcuf7VyebyKcVDqfViUkqfh&index=126>

Contradiction and Contraposition Note.pdf

<https://deanza.instructure.com/courses/33250/files/10826780?wrap=1> 
https://deanza.instructure.com/courses/33250/files/10826780/download?download_frd=1

Now answer the following question:

Which method we use to prove: "There Is No Greatest Integer"

☐ Direct Proof

☐ Contraposition

☒ Counter example

☐ Contradiction

Question 2

1 / 1 pts

The square of any odd integer has the form $8m + 1$ for some integer m . <https://www.youtube.com/watch?v=ITOJFGXB0u0&list=PLiWEbczHeZcuf7VyebyKcVDqfViUkqfh&index=123>

There is no greatest integer Proof <https://www.youtube.com/watch?v=GKbYLSJMDAM&list=PLiWEbczHeZcuf7VyebyKcVDqfViUkqfh&index=1>

Method of Contradiction: There is no integer that is both even and odd. [↗\(https://www.youtube.com/watch?v=11RSBXQO6Vo&list=PLiwEbczHeZcuf7VyebyKcVDqfViUkqfh&index=12\)](https://www.youtube.com/watch?v=11RSBXQO6Vo&list=PLiwEbczHeZcuf7VyebyKcVDqfViUkqfh&index=12)

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(https://deanza.instructure.com/courses/33250/files/10826780/download?download_frd=1)

Now answer the following question:

Which method we use to prove: "There is no integer that is both even and odd."

☐ Direct Proof

☐ Counter Example

☒ Contradiction


☐ Contraposition


Question 3

1 / 1 pts


The square of any odd integer has the form $8m + 1$ for some integer m . [↗\(https://www.youtube.com/watch?v=ITOJFGXB0u0&list=PLiwEbczHeZcuf7VyebyKcVDqfViUkqfh&index=123\)](https://www.youtube.com/watch?v=ITOJFGXB0u0&list=PLiwEbczHeZcuf7VyebyKcVDqfViUkqfh&index=123)

There is no greatest integer Proof [↗\(https://www.youtube.com/watch?v=GKbYLSJMDAM&list=PLiwEbczHeZcuf7VyebyKcVDqfViUkqfh&index=1\)](https://www.youtube.com/watch?v=GKbYLSJMDAM&list=PLiwEbczHeZcuf7VyebyKcVDqfViUkqfh&index=1)

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Now answer the following question:

Which method we use to prove: "Prove that for all integers n , if n^2 is even then n is even."

☐ Direct Proof

☐ Counter example

☐ Contradiction

☒ Contraposition

Quiz Score: **3** out of 3