

# Lecture 1

Wednesday, August 30, 2023 2:24 PM

\* Prayer

Question to ponder: why do we need to learn math when we can use calculators and computers, which can do a much better job than we do?

Math > computation

$\frac{1}{0.0000001}$  is a very large number. I don't need a computer to know that.

Math helps develop our brain. We need our brain to make decisions in life. Calculators and computers can only do the technical part of Math. It cannot think for us. Learning Math can help us become more like God.

Syllabus:

Homework — 20%  
Quizzes — 10%  
Chapter quizzes — 10%  
Attendance — 10% + extra credit  
Midterm 1 — 15%  
Midterm 2 — 15%  
Final exam — 20%

In this modern age, we receive a lot of information from the media. There are also false arguments. Being able to analyse the logic behind those arguments can help us be aware of fallacies.

premises : facts / assumptions

↓ argument could be false

Conclusion

Common fallacies include:

- A. Appeal to popularity: if many people believe that A is true then A must be true.
- B. False cause: if A happens before B then A causes B.
- C. Appeal to ignorance: if there is no proof that A is false, then A must be true.
- D. Hasty generalization, if A and B sometimes link together, then A causes B.
- E. Limited choice: if A is false then B must be true.

Give an example to each fallacy.

On the worksheet, identify the premises, conclusion, and the type of fallacies.