



Agoura Math Circle ACT Training

ACT Training

The ACT is a standardized test used for college admissions in the United States. It is currently administered by ACT, a nonprofit organization of the same name. The ACT test covers four academic skill areas: English, mathematics, reading, and science reasoning. It also offers an optional direct writing test. It is accepted by all four-year colleges and universities in the United States as well as more than 225 universities outside of the U.S

In this course, we'll discuss various sections of ACT test in detail with various tips in addressing those efficiently. We'll do this as a four-part, 24-hour course consisting of 12 sessions:

1. ACT English
2. ACT Reading
3. ACT Math
4. ACT Science

Final Exam: Actual ACT exam from QAS tests

Course flow

We'll start out our journey by introducing students to the general structure of ACT exam and various sections of the test in detail. Final tests will be from past actual ACT QAS questions which no students would have access to so students do not exhaust all the released question papers.

Recommended Textbooks

ACT Prep Black Book (Mike Barrett)

For the Love of ACT Science (Michael Cerro)

The Real ACT Prep Guide, 3rd Edition (AKA the RED book)

Class Schedule

Alternate Sundays 1:00 pm – 3:00pm (online).

Class	Homework Review	Quiz	Lecture & Class Work
ACT Training	1:00 – 1:30 PM	1:30 PM – 1:45 PM	1:45 PM – 3:00 PM

Please note that if you miss two classes in a row, you'll not be able to follow the topics anymore. Students must login 10 min before start of the class.

Course Details

Pre-requisites: Good understanding of basic mathematical concepts (no higher than taught in Senior Intermediate level at Agoura Math Circle). Also, students are expected to get their own desktops or laptops to program.

Course Registration & Website: Each student should register for the class. All course communication, homework submission will be through the course website. Each student has to register for each one of the four sessions irrespective of whether they have previously registered or not. Preference will be given to students who have attended previous sessions.

Class workload: Apart from the 2 hours of class once every 2 weeks, students are expected to spend at least 45 minutes every day of the week for a total workload of between 10 – 12 hours. If you can't make this commitment for about 2 hours, please do not register.

Class style: Classes will be Skype based in an interactive manner involving discussions. Instead of striving towards finishing certain amount of material in each class, we'll work towards certain milestones to complete in every session. During the courses, a textbook will be recommended for each part. Students are expected to come to class with a calculator.

Homework Policy: After each class, homework assignments will be mailed out. Most of the homework problems are real time ACT problems and would give a wonderful experience of the test. Please ensure homework submitted is completely your work so we can monitor your progress without skewing. Any sort of plagiarism will not be tolerated.

Final Exam Policy: Final exam will be a real ACT test.

What will you learn from this course?

1. Learn the structure of the ACT exam
2. Learn time management skills to apply as per your convenience
3. How to identify the patterns of the different ACT questions and arrive at the answer effectively.
4. How to prepare for each of the 4 sections of the ACT tests

Syllabus

Part 1: English (3 weeks)

1. **Commas**

Reading comprehension questions

Most relevant information

Best conclusion

Most effective information

Most effective transition

Sentence or paragraph placement

Precision vocabulary

Adding or deleting a phrase or sentence

Fulfil writer's goal?

2. **Grammar style questions**

Sentence fragments

Run-on sentences

Verb conjugation

Possessives

Who vs Whom

Much vs Many

Would of

Comparatives and superlatives

Comma sandwich

List of 2 things

Idioms

Redundancy

3. **Irrelevant information**

Proximity

Relationship words

Shorter is better

Which would be least acceptable?

Parallelism

Combination of Reading Comprehension and grammar style questions

Answer choice patterns

Most like the others

Functionally identical answer choices

No special consideration for No change

When to omit underlined portion

Part2: Reading (4 weeks)**1. All answers are stated directly, No interpretation, direct statement**

Ways of reading passage

Walkthrough of real questions

2. Answer choice pattern

Reasonable assumption

Confused concept

Exact opposite

Completely irrelevant

3. Paragraph citations/ Questions without citation

Main idea question

4. EXCEPT questions

Vocabulary in context

Part3: Math (3 weeks)**1. Overview of ACT Math**

ACT Math toolbox

Basics Review (Arithmetic, algebra, geometry, bit of trigonometry)

Unwritten rule of ACT

Words and symbols

No advanced formula

Simple calculations

Limited subject matter

30 seconds or less rule

All necessary information

Scale is pretty much accurate

Answer choices are important

Testing values

2. ACT answer choice patterns

On the way answer

Calculation mistake

Most like the others

Half or double

Series

3. Process of answering
 - Note words,
 - Consider answer choices,
 - Determine right math domain,
 - 30 second solution,
 - Solve and Check
- Calculator tips
Odd-looking shapes
NOT and EXCEPT questions

Part4: Science (2 weeks)

1. **Types of passages**
 - Locators
 - Trends in tables and figures
 - Math
 - Extrapolation and estimation
 - Data Bridge
 - Yes, Yes, No, No
 - Cannot be determined
 - Equations as answer choices
 - Mixing
 - Scatter Plots
 - Water and drying
2. **Elements of an experiment**
 - Inverse Trend
 - Anticipating the extra step
 - Outside knowledge
 - Conflicting viewpoints
 - Irrelevant argument

Final Test (Take home test)