Catholic High School Entrance Exams Supplemental Materials

Module 1: Introduction to the Exams & How to Use This Course

A bit about the exams:

Curvebreakers' Catholic High School Entrance Exams course is meant to help students prepare for one of the following exams: **the TACHS, the HSPT, or the COOP**.

Be sure you check with the schools to which you plan to apply and ensure you are taking the correct exam. Exams are typically administered in **early November**.

The exams are structured differently and have slightly different questions, but they are ultimately more alike than they are different. There is a significant amount of overlap in the content, strategies, and material that you should be familiar with. The exams are design to test your abilities with:

- Reading comprehension
- Mathematics
- Language (grammar and vocabulary)
- Reasoning and Pattern Recognition

The organizations that administer these exams do not release much information about the actual tests. Exams from previous years are often not available, and study materials can be difficult to find. With that said, there may be **slight differences** between what we discuss about the structure of the exam (time constraints, exact number of questions, etc.) and what you encounter on test day, but these differences should be minor.

A bit about the course:

The course is broken into 10 modules, each with a video spanning roughly **10 to 30 minutes**. Modules 1-6 and module 10 apply to all three exams, but modules 7, 8, and 9 are specific to the one of the three tests. Be sure to watch only the module for the exam you are preparing for.

Be prepared to take notes on any concepts or strategies of importance.

For any practice problems that are reviewed, consider pausing the video and working through the problem on your own prior to watching the explanation. This will help you determine your unique strengths and weaknesses and further direct your studying.

A look ahead:

Module 1 → Introduction
Module 2 → Study Tips and Test Taking Strategies
Module 3 → Reading Comprehension
Module 4 → Language
Module 5 → Mathematics
Module 6 → Reasoning and Pattern Recognition
Module 7 → The TACHS
Module 8 → The HSPT
Module 9 → The COOP
Module 10 → Conclusion

Module 2: Study Tips & Test-Taking Strategies

Study Tips:

- **Repetition** and **practice** is key: reguralary read and re-read the materials provided, watch the relevant videos, and work through practice problems
- Study **consistently**. Do not wait until the night before the exam to start preparing.
- Carve out **designated time** each week to work on test prep.
- **Create flashcards** that contain important concepts, rules, formulas, or strategies. Study these regularly.
- Assess your own strengths and weaknesses. Which concepts do you regularly forget? Which question types do you consistently get wrong? Focus on the subject matter you are struggling with the most.

Test-Taking Strategies & Tips:

- Utilize the **process of elimination**. Eliminate answers that you know are wrong first, rather than looking for the correct answer to a question straight away.
- **Read carefully**! Read both the questions and answer choices extremely closely.
- If you are confused by the wording of a question after the first time you read it, that's okay! Don't be afraid to read it again, **breaking the question down into parts**.
- You may want to think of the entire test as a test of your reading comprehension abilities, even when you're not working on a reading comprehension question.
- Double check your work for avoidable mistakes. This tip applies mostly to math questions, but is also potentially useful on the other sections as well.
    - If you're dealing with a question that involves negative numbers, or exponents, or any kind of calculation you're doing by hand, then it's important to double check your work (if you have time) and make sure you haven't made any avoidable mistakes.
- **Prioritize the "easier" questions**. "Easy" is a relative term. Whatever questions you feel the most confident about should be answered first.

- **Answer every question**. If you run out of time or don't know how to answer specific questions, you should still fill in an answer.
- Keep an eye on the clock so that you can **manage your time effectively**.
  - Keep the pace moving. Many of these sections are designed to move fairly quickly. If you don't know how to answer a question, move on and only return if time allows.
- **Actively use your pencil.** Mark up key words in the questions, answer choices, and passages (when applicable).
  - For math-related sections, mark up any figures provided or draw your own if they are not provided. Work through calculations on paper.
- Know well in advance exactly **when and where you're taking the test**, regardless of whether it's the TACHS, HSPT, or COOP. With your parents' help, collect all that information as soon as you can and make sure you have it written down in an easily accessible place.
- **Get a good night's sleep** the night before the exam and gather any materials you may need for the next day.
- The morning of the test, **eat a substantial breakfast**.

Module 3: Reading Comprehension

What's the Gist?

Each of the Catholic High School Entrance Exams has a section dedicated to reading comprehension. You will be given a short passage to read, typically a few paragraphs long, and then asked a series of questions based on what you've read. Passages can be either fiction (fake) or nonfiction (real).

There are a few types of questions you will likely encounter:

- Main Idea
- Vocabulary-In-Context
- Specific Detail
- Inference

Strategies For Tackling the Questions:

Main Idea Questions: will ask you to identify the main point or main purpose of a passage.

- Typically best to stay away from very specific answer choices; instead, you want to think in broad terms about the passage as a whole
- Just because something happens in the passage, or a particular detail about the passage is true, that does NOT mean that represents the *main* idea of the passage

Vocab-In Context Questions: will ask you to identify the meaning of of a specific underlined word as it used in a sentence from the passage.

- Always go back to the passage and read the exact sentence in which the word is being used; words can have multiple meaning depending on the context in which they're used, so context is key
- If you're unfamiliar with a word, use context clues and other hints to help figure out how it's being used
- Sometimes it helps to think about what part of speech the underlined word is: is it a noun, adjective, verb?
- Don't automatically pick the answer choice that is closest to the meaning of the word you already know. Always go back to passage and see how the word is being used in context

Specific Detail Questions: will ask you to recall details from the passage.

- Look back in the passage to find these specific details if necessary
- These questions might ask you to recall details such as the setting of the passage, activities a certain character does, or why they do them
- Be careful when answering questions with the words “NOT” or “EXCEPT” in them: often these questions ask you to pick something that is NOT true of that did NOT happen in the passage

Vocab-In-Context Questions: will ask you to make an inference, or conclusion, about what you’ve read in the passage.

- You will have to make a logical assumption about the information presented in the passage
- When answering these questions, pay attention to the author’s attitude, or tone, and what their unstated purpose for writing the passage might be

Module 4: Language

What's the Gist?

"Language arts" is a term that covers a wide range of material, which we will categorize into two groups: **grammar and vocabulary**. Grammar covers basic parts of speech, sentence structure, and punctuation rules. Vocabulary covers the meanings of words as well as the relationships among them.

These concepts will be found on the following sections:

- TACHS → Reading and Language Arts
- HSPT → Verbal Skills and Language Skills
- COOP → Verbal Reasoning- Words and Reading & Language Arts

Some questions will ask you to read a sentence (or group of sentences) and to determine which sentence, if any, contains any grammar or usage mistakes. Questions on vocabulary-focused sections will usually ask you about the spelling as well as the meanings of words.

Grammar Review & Tips:

Key Terms:

- **Subject:** the person or thing being discussed
- **Predicate:** the part of a clause that contains a verb and indicates what the subject is doing (or what state it's in)
- **Independent Clause:** a group of words that contains a subject and a predicate and can stand alone as a sentence
- **Dependent Clause:** a group of words that contains a subject and verb but does **not** express a complete thought
- **Coordinating Conjunctions:**words that join nouns, verbs, or clauses of equal grammatical rank. The acronym FANBOYS can help you remember the 7 most common: For, And, Nor, But, Or, Yet, So.
- **Subordinating Conjunctions:** words that join subordinate clauses to a main clause. "While," "although," "because," "since," and "if" are all subordinate conjunctions.

Semicolons: used to separate two independent clauses.

- Sometimes referred to as a “weak period,” since they function in the same way a period does.

Colons: introduce related information without the need for language like “such as” or “which are”.

- What comes before a colon MUST be an independent clause
- What comes after a colon can be anything: a list, a quote, a word, a fragment, or even another independent clause

Commas: indicate a pause between parts of a sentence. Below are the five most common reasons for a comma:

- To separate 3 or more items in a list.
  Ex: My three favorite fruits are apples, bananas, and strawberries.
- To separate transition words/phrases (like “however,” “for example,” “therefore”) from the rest of the sentence.
  Ex: However, many of the students did not complete the assignment.
- To add extra, non-essential information at the start, end, or middle of a sentence. When extra information is added into the middle of a sentence, commas are used at both the beginning and end of the extra information.
  Ex: The school, located north of the expressway, was closed for the summer.
- To join two independent clauses together with a coordinating conjunction.
  Ex: Sarah likes tacos, so she goes to Chipotle every Wednesday.
- To separate a dependent clause (often containing a subordinating conjunction) from an independent clause that follows.
  Ex: While Samanth was eating, Nicholas was watching television.

Verb Tense:

- Make sure that verbs (action words) are in the proper tense. Consider if something should be written in past, present, or future tense.
- Read carefully and search for contextual clues to determine the proper tense. It is helpful to look for other verbs in the sentence (and sometimes the nearby sentences).
- Make sure the verb matches the subject (who or what is performing the action). Is the subject singular or plural?
  - For **singular** subjects, we use verbs like “is,” “was,” “has,” and verbs that end in an ‘s”
  - For **plural** subjects, we use verbs like “are,” “were,” “have,” and verbs that do **not** end in an ‘s”

Vocabulary Review & Tips:

- Depending on which exam you take, you may be asked to determine if a particular word in a sentence is **spelled** incorrectly, or you may be asked to determine if a single word among a group of words is spelled incorrectly.
- Some questions will ask you to determine which word in a group of words is **least** like the others.
- Some questions will require you to guess the meaning of words. For these questions, look at the root words and pay attention to **prefixes** and **suffixes**.
    - Always use context clues if they are present. If the word you are trying to guess the meaning of is present in a sentence, make sure the meaning that you are guessing makes sense within the context of the sentence.
- If you come across a question with a word you don't know how to spell or a word whose meaning you don't know, don't panic. Focus on what you DO know. Focus on words you DO know how to spell and whose meanings you DO know, and use **process of elimination** accordingly. If you need to, make an educated guess.
- Some ways you can increase your knowledge of spelling and vocabulary before you take your Catholic High School Entrance Exam include reading and studying vocabulary and spelling books.
- Always be on the lookout for words like **"not"**, **"opposite"**, and **"except."** You always want to read the questions extremely carefully.

Module 5: Mathematics

Definitions & Important Terms:

Prime Numbers: A number that is only divisible by itself and 1.

Ex: 2, 3, 5, 7, 11, 13, 17…

Integers: Numbers that has no decimal or fractional parts. They include the positive and negative counting numbers and zero.

Ex: ...-3, -2, -1, 0, 1, 2, 3…

Factors: Factors are whole numbers that multiply together to get another number.

Ex: 4 & 5 are multiples of 20, since 4 x 5 = 20.

The factor of a number divides that number evenly.

Ex: 5 is a factor of 30, since 30/5 = 6.

Multiples: A multiple of a number is that number multiplied by an integer.

Ex: The multiples of 5 are 5, 10, 15, 20, 25, 30

Sum: Addition

Product: Multiplication

Difference: Subtraction

Quotient: Division

Fractions:

Simplifying: To simplify a fraction, find a number that divides evenly into the numerator (the top of the fraction) and the denominator (the bottom of the fraction).

Ex: $\frac{24}{18} = \frac{24 \div 6}{18 \div 6} = \frac{4}{3}$

Multiplying: To multiply two fractions, simplify each and them multiply across (multiply numerator by numerator and denominator by denominator).

Ex: $\frac{12}{9} \times \frac{4}{6} = \frac{4}{3} \times \frac{2}{3} = \frac{4 \times 2}{3 \times 3} = \frac{8}{9}$

Fractions (continued):

Dividing : To divide fractions, multiply the first fraction by the reciprocal (flip) of the second fraction. Simplify if you can.

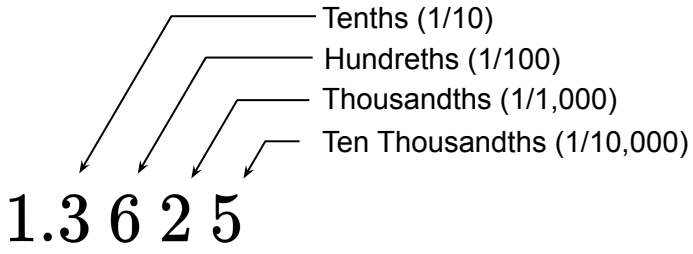
Ex: $\frac{7}{9} \div \frac{3}{2} = \frac{7}{9} \times \frac{2}{3} = \frac{14}{27}$

Adding/Subtracting: To add or subtract fractions, first find a common denominator. Change both fractions so that the denominators are the same. Then add or subtract the numerators and put the result over the common denominator.

Ex: $\frac{2}{3} + \frac{3}{5} = \frac{(5)2}{(5)3} + \frac{3(3)}{5(3)} = \frac{10}{15} + \frac{9}{15} = \frac{19}{15}$

Decimals and Percents:

Decimals:



1.3 → "1 and 3 tenths" → $1\frac{3}{10}$

1.36 → "1 and 36 hundredths" → $1\frac{36}{100}$

1.362 → "1 and 362 thousandths" → $1\frac{362}{1000}$

1.3625 → "1 and 3625 ten-thousandths" → $1\frac{3625}{10,000}$

Percents:

$$\frac{\%}{100} = \frac{\text{part}}{\text{whole}} = \frac{\text{is}}{\text{of}}$$

To convert a percent into a decimal, move the decimal 2 places LEFT.

Ex: $35\% = .35$ $\quad 8\% = .08$

$5.5\% = .055$ $\quad 150\% = 1.5$

Common Percents:

$50\% = \frac{1}{2}$ $\quad 33\frac{1}{3}\% = \frac{1}{3}$

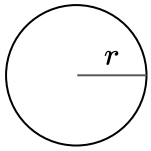
$25\% = \frac{1}{4}$ $\quad 20\% = \frac{1}{5}$

Geometry:

Area, Perimeter, and Volume Formulas:

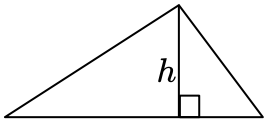
$A = lw$

$P = 2l + 2w$

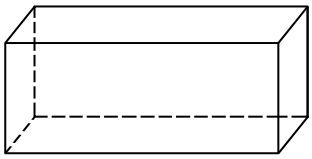


$A = \pi r^2$

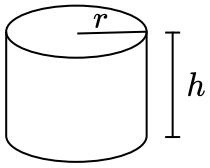
$C = \pi d$



$A = \frac{1}{2}bh$



$V = lwh$

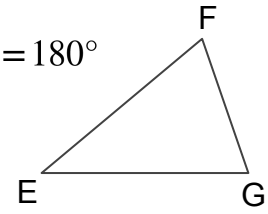


$V = \pi r^2 h$

Triangle Properties:

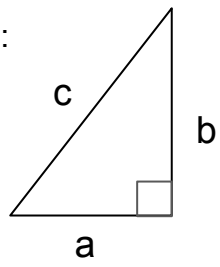
For all triangles:

$\angle E + \angle F + \angle G = 180°$

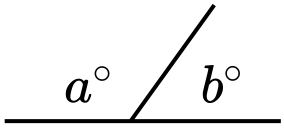


For all **right** triangles:

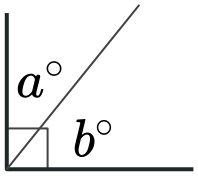
$a^2 + b^2 = c^2$



Angle Properties:



$a + b = 180°$



$a + b = 90°$

Complementary Angles → add up to 90

Supplementary Angles → add up to 180

Additional Topics/Formulas

The Order of Operations (PEMDAS):
Parentheses, **E**xponents, **M**ultiplication, **D**ivision, **A**ddition, **S**ubtraction

Absolute Values: An absolute value takes whatever is inside the brackets (after calculations have been performed) and makes it positive

Ex: | 2 - 5 | = | –3 | = 3

$$\underset{\text{(Mean)}}{Average} = \frac{Sum}{\#\ of\ terms}$$

$$x^a = \underbrace{x \cdot x \cdot x \cdot \ldots \cdot x}_{a \text{ times}}$$

When adding:
- If the numbers are the same sign (both positive or both negative), add and give the common sign.
- If one is positive and one is negative, subtract and give the sign of the bigger number.

When subtracting:
- Add the opposite (keep, change, change)

When isolating/solving for a variable: "undo" everything being done to that variable by performing the "opposite" operation.
- Addition vs. Subtraction
- Multiplication vs. Division
- Square vs. Square root

Work in the opposite order of PEMDAS, but deal with any larger/universal operations first. **Remember that anything you do to one side of an equation, you must do to the other side!**

Ex:

$$4x - 3 = 13$$
$$+3 \quad +3$$
$$4x = 16$$
$$\frac{4x}{4} = \frac{16}{4}$$
$$x = 4$$

Ex:

$$\frac{x+6}{2} > 8$$
$$(2)\frac{x+6}{2} > 8\ (2)$$
$$x + 6 > 16$$
$$-6 \quad -6$$
$$x > 10$$

Tips/Strategies For the Math Sections:

- **Read very carefully**. The math section should be thought of as a test of reading comprehension in addition to being a test of math ability.
- All questions are worth the same number of points, so **prioritize the questions you find easiest** and do those first.
    - Skip problems that you find difficult. It's better to spend your time on questions that are likely to earn you points.
- Do your best to decipher a problem to determine what the underlying topic is and what skills you may need to solve it.
- Use your pencil! Mark up provided figures or create your own when they are not provided.
    - Do not do tricky operations (like long division) in your head. Use the provided space to write out the necessary arithmetic

Module 6: Reasoning & Pattern Recognition

What's the Gist?

Many questions on these Catholic High School entrance exams will require you to recognize some sort of pattern or use some kind of logic to answer them.

These skills will be tested on the following sections:

- TACHS → Abilities
- HSPT → Verbal Skills and Quantitative Skills
- COOP → Sequence, Analogies, Quantitative Reasoning, Verbal Reasoning: Words, and Verbal Reasoning: Context

If you're dealing with a pattern, it will fall into one of three categories: **visual, linguistic, or numerical**. In other words, sometimes you'll have to notice a pattern in some pictures, words, or numbers.

Sometimes questions will ask you to continue a provided sequence or identify which word among a group of words does not belong. Other times you'll have to identify how certain words are grouped together by figuring out the common relationship among them, and move forward with whatever the question in particular wants you to do.

Questions Types and Tips:

Logic Questions: will require you to reach a logical conclusion based on the given information.

- Only use information that the question gives you.
- Do not make any assumptions or use prior knowledge to help you answer these questions.

Word Relation Questions: will ask you to pick the word among the four that does not belong.

- Think of what "categories" you might be able to group the words into.
- If all four words fit into your chosen category, it will not work. Try to think of another (perhaps more specific) category.

Word Sequence Questions: will ask you to identify how words in a sequence are related and continue the sequence.

- Define the top sequence according to some logic and then apply that logic to the bottom sequence.

Number Series Questions: will require you to figure out how a series of numbers is progressing.

- Typically, you will have to figure out what operation(s) is applied to a number or group of numbers.
- Try to determine what operation can get you from one number to the next. Consider addition, then multiplication, and so on.
- You may have to fill in a missing value in the middle of the series or at the end of the series.

Figure Classification Questions: will provide three figures that are alike in a certain way and ask you to choose among the answer choices the figure that is the most like the three presented.

- There may be a lot of characteristics to notice about the figures, but look for common characteristics that all three figures share.
    - Consider the shape of the figures, the number of sides, and any special markings.
- Eliminate answer choices that don't share those common traits.

Analogy Questions: will require you to identify how two words or pictures are related and then apply that relationship to a second set of words or pictures.

- Think of a "bridge" statement or idea that connects the first set of terms/images and then apply that "bridge" to the second set.
    - Are the terms opposites? Are they synonyms?

Shading Questions: will ask you to identify what fraction (portion) of a figure is shaded in.

- Try breaking the figure down into smaller, equally sized portion.
    - Try cutting it in halves, then in fourths. Use diagonals when applicable.

Module 7: The TACHS

What's the Gist?

The Test for Admission into Catholic High Schools, also known as the TACHS, features **200 multiple-choice questions**. The exam is composed of **four primary sections**, which are further divided into two subsections. The majority of the content on this exam overlaps with the HSPT and COOP, the outliers being the estimation and abilities sections.

The structure of the TACHS exam is as follows:

- **Reading** (35 minutes)
  - Vocabulary (20 questions, 10 minutes)
  - Reading Comprehension (30 questions, 25 minutes)
- **Language** (30 minutes)
  - Spelling, Capitalization, Punctuation, Usage/Expression (40 questions, 23 minutes)
  - Paragraphs (10 questions, 7 minutes)
- **Mathematics** (40 minutes)
  - Concepts, Data Interpretation, Problem Solving (32 questions, 33 minutes)
  - Estimation (18 questions, 7 minutes)
- **Abilities** (32 minutes)
  - Similarities and Changes (40 questions, 25 minutes)
  - Abstract Reasoning (10 questions, 7 minutes)

About Each Section:

- **Vocabulary:** This section tests students' knowledge of definitions. Refer to the *Language Arts Module* for more information.
- **Reading Comprehension:** Students demonstrate their ability to analyze text by making inferences and identifying details. Refer to the *Reading Comprehension Module* for more information.
- **Spelling, Capitalization, Punctuation, and Usage/Expression:** Students must show their knowledge of grammar by answering questions about sentences and paragraphs. Refer to the *Language Arts Module* for more information.
- **Paragraphs:** Students answer questions about the organization and clarity of paragraphs. Refer to the *Language Arts Module* for more information.

- **Concepts, Data Interpretation, Problem Solving:** This section includes word problems, operations, and analyses of graphs and tables. Refer to the *Mathematics Module* for more information.
- **Estimation:** Students must answer questions in which they approximate or round numbers. Continue reading this module for more information.
- **Similarities and Changes:** This section tests students' ability to analyze patterns and sequences. Refer to the *Reasoning and Pattern Recognition Module* for more information.
- **Abstract Reasoning:** Students make inferences and predictions about patterns. Continue reading this module for more information.

The Estimation Section:

Students will estimate addition, subtraction, multiplication, and division problems in this section. You will not need to provide exact answers or calculations. Some practice tests indicate that students are NOT allowed to write down any calculations on this section, so be prepared to do some math in your head.

TIP: Round your values up or down to numbers that are easier to work with **BEFORE** you add, subtract, multiply, or divide them. This strategy works for small decimals, large numbers, and everything in between.

The Abilities Section:

This section asks you to imagine folding a piece of paper a given number of times, usually once, twice, or three times. You'll then envision punching a hole into it, then unfolding the paper completely. Students will need to determine the location of the holes in the fully unfolded piece of paper.

TIP: The number of holes punched into a folded piece of paper will double each time the paper is folded. For example, a paper folded once with two holes then punched into it will have four holes total once it is unfolded.

Module 8: The HSPT

What's the Gist?

The High School Placement Test, or the HSPT, tests eighth-grade students on the following five subjects: verbal skills, quantitative skills, reading comprehension, mathematics, and language. Some high schools will require you to complete additional sections, such as a science or religion section. Make sure you check the specific testing requirements of any schools you would like to attend. The standard HSPT exam will have a total of about **300 multiple-choice questions** that take **about 2 hours and 30 minutes** to complete.

The structure of the HSPT exam is as follows:

- **Verbal Skills** (60 questions, 16 minutes)
- **Quantitative Skills** (52 questions, 30 minutes)
- **Reading Comprehension** (62 questions, 25 minutes)
- **Mathematics** (64 questions, 45 minutes)
- **Language Skills** (60 questions, 25 minutes)

NOTE: The timing and number of questions for each section are approximations based on information from previously administered HSPT exams.

About Each Section:

- **Verbal Skills:** Students will be tested on their knowledge of synonyms and antonyms, vocabulary, analogies, logic-based questions, and verbal classifications. Refer to the *Language Arts Module* for more information.
- **Quantitative Skills:** Students will be tested on their ability to determine number series, make geometric and non-geometric comparisons, and perform number manipulations. Refer to the *Reasoning and Pattern Recognition Module* for more information.
- **Reading Comprehension:** Students will be tested on their ability to comprehend humanities, short nonfiction, and narrative passages, as well as their vocabulary skills. Refer to the *Reading Comprehension Module* for more information.

- **Mathematics:** Students will be tested on their math skills, comprehension, and knowledge of arithmetic, basic algebra, and geometry. Refer to the *Mathematics Module* for more information.
- **Language Skills:** Students will be tested on their knowledge of capitalization, grammar, usage, punctuation, spelling, and sentence structure. Refer to the *Language Arts Module* for more information.

Base 5 & Other Unusual Base Arithmetic

The “base” of a number system refers to how many different numbers we are “allowed” to write in a single column, or place. In base 10, which is what we normally use for arithmetic, there are 10 total digits we can use (those being 0-9. If we count 0, then 9 is technically the 10th digit we have available for use).

In base 5, we can only use the numbers 0-4. If we count 0, then 4 is technically the 5th number we can use.

In base 5, you can not have a number with any digits higher than 4. So the number 2312 is a valid number in base 5. The number 3782 is NOT valid in base 5.

It should be noted that you MIGHT be asked to do arithmetic in unusual bases, and that even if it does show up on the mathematics section of the HSPT, it will not account for a large portion of the questions on that section.

If you feel like you’re totally lost and don’t know how you’ll manage doing arithmetic in base 5, don’t freak out. The HSPT consists of almost 300 multiple choice questions in total, which means that not understanding a concept necessary for answering only a few questions will not have a huge impact on your overall score.

Module 9: The Coop

What's the Gist?

The Cooperative Admissions Examination Program, or the COOP exam, is composed entirely of multiple choice questions that cover content in the following seven sections: sequences, analogies, quantitative reasoning, mathematics, reading and language arts, verbal reasoning for words, and verbal reasoning for context. The COOP exam will have a total of about **170 multiple-choice questions** that take **about 2 hours** to complete.

The structure of the COOP exam is as follows:

- **Sequences** (20 questions, 15 minutes)
- **Analogies** (20 questions, 7 minutes)
- **Quantitative Reasoning** (20 questions, 5 minutes)
- **Verbal Reasoning: Words** (20 questions, 15 minutes)
- **Verbal Reasoning: Context** (10 questions, 7 minutes)
- **Mathematics** (40 questions, 35 minutes)
- **Reading and Language Arts** (60 questions, 25 minutes)

NOTE: The timing and number of questions for each section are approximations based on information from previously administered HSPT exams.

About Each Section:

- **Sequences:** This section presents students with sets of figures, numbers, or letters, and students must identify the pattern and give the next figure, number, or letter that completes the sequence. Refer to the *Reasoning and Pattern Recognition* for more information.
- **Analogies:** In this section, students have to look at two illustrations, judge the relationship between them, and then apply that relationship to a second group of illustrations. Refer to the *Reasoning and Pattern Recognition Module* for more information.
- **Quantitative Reasoning:** Students must apply operations to groups of numbers, evaluate what fraction of a grid is shaded in, and balance scales with weighted shapes. This section is similar to the sequences section, but more math focused. Refer to the *Mathematics Module* and the *Reasoning and Pattern Recognition Module* for more information.

- **Verbal Reasoning: Words:** Students must determine relationships among groups of words. Some questions on this section will ask students to look at a group of words and then choose, among the answer choices, which word is most similar. Others will be formatted similarly, but will ask students which word does NOT belong. Refer to the *Language Arts Module* and the *Reasoning and Pattern Recognition Module* for more information.
- **Verbal Reasoning: Context:** Students are given various scenarios and have to determine which statements among a group of answer choices must be true or are most likely true based on what they've read. This section is heavily focused on logic and reasoning. Refer to the *Reasoning and Pattern Recognition Module* for more information.
- **Reading and Language Arts:** Students must read passages of varying lengths and answer questions that follow. Refer to the *Reading Comprehension Module* and the *Language Arts Module* for more information.
- **Mathematics:** Students are tasked with answering math questions on concepts such as the order of operations, absolute value, exponents, algebra (solving for variables), geometry (supplementary angles, area of basic two dimensional shapes), interpreting graphs and figures, and more. Refer to the *Mathematics Module* for more information.