## Babylon Junior-Senior High School PSAT/SAT/ACT Workshop

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Method Test Prep

## What is MTP Made Of?

- Passion
- Every student should have access to high-level prep
- Knowledge
- We take the tests ourselves
- Experience
- SAT \& ACT experts for 17 years and counting


## Part 1

## Understanding Your PSAT Report

## The Big-Picture Scores

## Your Total Score



You scored equal to or higher than $99 \%$ of students

- The total score is 1520 ? How does this align with an SAT score?
- Keep in mind that the PSAT is slightly shorter \& easier
- "Vertical scoring scale" means you can equate PSAT \& SAT
- Colors indicate performance - notice benchmarks


## Where Did the Scores Come From?



- Think of these as preliminary scores that are then scaled
- The Reading and Writing \& Language scores contribute equally to the Evidence-Based Reading \& Writing Score
- The Math score came from the No-Calculator and Calculator-based sections


## More Numbers Online

## PSAT/NMSQT

October 10, 2018

## 1380

Total Score
680
Evidence-Based
Reading and
Writing

700 Math

- Log on to psat.org/myscore
- Click "View Details"


## More Numbers Online



- These are visual representations of the individual section scores, with benchmarks
- View \# of correct, incorrect, and omitted answers
- Click question boxes below to see actual questions, your answers, and correct answers (Wednesday, Oct 10 administration only)


## Question-Specific Breakdown

Section tabs


Access by clicking Question boxes below section scores

Click question numbers to view questions and answers (Wednesday PSAT only)

## The NMSQT Index

- Ranges from 48 to 228


## $\square$ NATIONAL MERIT <br> SCHOLARSHIP CORPORATION

Your NMSC Selection Index
206*
NMSC uses a Selection Index score based on PSAT/NMSQT scores as
an initial screen of students who enter its scholarship programs. The
Selection Index score is double the sum of your Reading. Writing and
Language, and Math Test scores.

- Used to gauge whether you are in contention for National Merit Scholarship
- Commendation
- Semi-Finalist
- Finalist
- Scholarship status is announced in fall of senior year (only juniors are eligible); qualifying scores for levels of recognition vary by state and year


## Taking Advantage of Your Report

| READING |  | 串 | $\begin{aligned} & \frac{2}{2} \\ & \frac{3}{3} \\ & \frac{5}{5} \end{aligned}$ |
| :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { U } \\ & 0.0 \\ & \hline 0 \end{aligned}$ |  |  |
| 1 | A | $\checkmark$ | － |
| 2 | D | $\checkmark$ |  |
| 3 | B | D | ＊＊＊ |
| 4 | B | c | － |
| 5 | D | $\checkmark$ | － |
| 6 | B | $\checkmark$ | －$\square_{\text {－}}$ |
| 7 | A | $\checkmark$ | － |
| 8 | D | A | ＊ロッ！ |
| 9 | C | $\checkmark$ | － 1 － |
| 10 | D | $\checkmark$ | －8．18 |
| 11 | D | $\checkmark$ | ＊ッ！ |
| 12 | A | B | － |
| 13 | C | $\checkmark$ | －！－ |
| 14 | C | $\checkmark$ | ＊！ |
| 15 | A | $\checkmark$ | ＊！ |
| 16 | D | $\checkmark$ | －！－！ |
| 17 | B | $\checkmark$ | － |
| 18 | B | $\checkmark$ | －！－ |
| 19 | A | B | －－－！ |
| 20 | A | $\checkmark$ | －！－ |

－Review the problems you answered incorrectly （red letters）！
－Numbers shaded in light red are＂easy＂level questions－pursue this low－hanging fruit first！

Part II

The SAT

## SAT - Reading

- Content Areas
- No sentence completions!
- Reading comprehension (passages \& questions)
- Integrated graphics \& data interpretation questions
- Evidence questions
- Vocab in context
- Structure \& Scoring
- 1 section
- 65 min (60 min PSAT)
- Score range 10-40 (will combine with Writing \& Language to create a score from 200-800)


## Question Type - Main Idea

- Use key phrases
- "Main purpose"; "Main idea"; "Primarily serves to"
- Bottom line: "What's the point?"
- Flaw in student approach: letting the answers drive the thought process
- Instead, go back, read reference lines, try to derive your own idea before looking at choices; then align own answer to choices
- Answers always contain distractors that seem relevant, but don't actually answer question


## Question Type - Evidence

- New to the SAT
- Always used as a follow-up question
- Potential for "double-whammy" incorrect answer pattern
- Many of the answers to the evidence question will be relevant to the idea in question: only one will support the idea specifically

It can most reasonably be inferred that after Miss Taylor married, she had
A) less patience with Mr. Woodhouse.
B) fewer interactions with Emma.
C) more close friends than Emma.
D) an increased appreciation for Emma.

Which choice provides the best evidence for the answer to the previous question?
A) Line 37 ("Miss ... married")
B) Lines 47-48 ("The event . . . friend")
C) Lines $60-65$ ("A large . . . recollection")
D) Lines 73-79 ("How . . . solitude")

- Great technique: anticipate the best evidence yourself; if you don't see it there, your first answer may be incorrect!


## Question Type - Words in Context

- Will now focus on simple, common words that can take on many different meanings
- Common flaws in student approach: (1) assuming a word is used as it "always" is, (2) not reading far enough around or considering local \& global main idea
- Here, student could use phrases around the word (she "recalled" her past kindness) and use main idea of passage (that Emma \& Miss Taylor had been separated)

> 50 manners; and there was some satisfaction in considering with what self-denying, generous friendship she had always wished and promoted the match; but it was a black morning's work for her. The want of Miss Taylor would be felt every hour of 55 every day. She recalled her past kindness-the kindness, the affection of sixteen years-how she had taught and how she had played with her from five years old-how she had devoted all her powers to

As used in line 54, "want" most nearly means
A) desire.
B) lack.
C) requirement.
D) request.

- More frequent - will now constitute about $20 \%$ of Reading test questions


## Question Type - Data Integration

- New to SAT
- Will pair a relevant graph, table, or chart with the passage
- Students will have to integrate terms and references in the passage with visual information to reach a conclusion
- Common student errors: careless reading of axes; incorrect "extension" of an idea to incorporate unsubstantiated claim
- Will constitute about $5 \%$ of Reading test questions


28
Which statement about the effect of hibernation on the seven bears is best supported by the graph?
A) Only one of the bears did not experience an appreciable change in its total plasma cholesterol level.
B) Only one of the bears experienced a significant increase in its total plasma cholesterol level.
C) All of the bears achieved the desirable plasma cholesterol level for humans.
D) The bear with the lowest total plasma cholesterol level in its active state had the highest total plasma cholesterol level during hibernation.

## SAT - Writing \& Language

- Content Areas
- Improving sentences
- Finding errors
- Improving passages
- Structure, punctuation, rhetorical skills
- All passage-based
- Graphics integration
- Structure \& Scoring
- 1 section
- 35 min
- Score range 10-40 (will combine with Reading to create a score from 200800)
- A near clone of the ACT English section


## Just Like One Big "Improving Paragraphs" Section

```
A Nod to Nodding Off
    With 30 percent of United States workers not getting
enough sleep at night, according to the Wall Street
Journal, US companies 1 lose a yearly sum of
$63.2 billion annually due to the drop in employee
productivity resulting from sleep deprivation.
1
A) NO CHANGE
B) see an annual loss of \(\$ 63.2\) billion each year
C) lose \(\$ 63.2\) billion annually
D) have a yearly loss of \(\$ 63.2\) billion annually
```


## An Example: "Red Flag" Words

## Where's the error?

The congressional panel issued their findings after conducting an investigation that lasted for over a year.

The
findings
The congressional panel issued its findings

## Plus Data

- Will also integrate data, whose interpretation can alter the sentence


## decreased slightly, and beekeepers speculated that the

colonies would recover. Yet in the winter of 2012-2013,
the 16 portion of the bee population lost fell nearly
10 percent in the United States, with a loss of 31 percent of the colonies that pollinate crops.

16
Which choice offers an accurate interpretation of the data in the chart?
A) NO CHANGE
B) portion of bees lost was double what it had been the previous year, rising to
C) number of losses, which had fallen within the acceptable range the previous year, rose to
D) portion of total colonies lost rose almost 10 percentage points, with a loss of

## Writing \& Language Pitfalls

- \#1 most common mistake: not reading enough around the underlined portion
- Get fuller context
- Re-read the sentence in full with your choice before moving on
- For rhetorical (placement, relevance, etc.) errors, students may have to read several sentences or may even have to re-read paragraphs
- Not understanding the subject
- Distinguish "red flag words" using MTP's program
- Pronouns
- Conjugations of "to be"
- Highlight prepositional phrases
- Not actually giving the question "what it wants"
- Don't simply pick what "sounds good"

12 pollination-to increase crop output. The $\qquad$ importance of bees 13 highlights the potentially
disastrous affects of an emerging, unexplained crisis: entire colonies of honeybees are dying off without

## warning.

## 13

A) NO CHANGE
B) highlights the potentially disastrous effects
C) highlight the potentially disastrous effects
D) highlight the potentially disastrous affects

11
The writer wants a concluding sentence that restates the main argument of the passage. Which choice best accomplishes this goal?
A) NO CHANGE
B) Clearly, employers should consider reducing employees' hours when they are overworked.
C) Companies should consider employee schedules carefully when implementing a napping policy.
D) More businesses should follow their lead and embrace napping on the job.

## SAT - Math

- Content Areas
- Algebra (emphasis here)
- Geometry (much less)
- Algebra II (more of it)
- Data \& statistics (more of it)
- Trigonometry (a little)
- Extended thinking
- Multiple choice \& grid-in
- Structure \& Scoring
- 2 sections
- No-Calculator - 25 min (20 PSAT)
- Calculator - 55 min (45 PSAT)
- Score range: 200-800


## Algebra to the Max

## - MAJOR emphasis on

- Constructing algebraic expressions based on statements
- Algebraic manipulation
- Factoring
- Solving in terms of multiple variables
- Solving multivariable equations
- Systems
- "Break-even" and "Two-Variable" problems

A grocery store sells a brand of juice in individual bottles and in packs of 6 bottles. On a certain day, the store sold a total of 281 bottles of the brand of juice, of which 29 were sold as individual bottles. Which equation shows the number of packs of bottles, $p$, sold that day?
A) $p=\frac{281-29}{6}$
B) $p=\frac{281+29}{6}$
C) $p=\frac{281}{6}-29$
D) $p=\frac{281}{6}+29$

Which of the following is equivalent to $(s-t)\left(\frac{s}{t}\right)$ ?
A) $\frac{s}{t}-s$

Basic algebraic skills
B) $\frac{s}{t}-s t$
C) $\frac{s^{2}}{t}-s$
D) $\frac{s^{2}}{t}-\frac{s}{t^{2}}$ are often weak
A) 10
B) 15
C) 25
D) 35

From No-Calculator
section - guess \& check method would be too burdensome for most

## Understanding Linear Relationships

- MAJOR emphasis on
- Interpreting slope \& y-intercept terms in contex $\dagger$
- As opposed to simply "find the slope/find the $y$ intercept"
- Constructing linear equations based on relationships
- As opposed to just "plug \& chug"
- Interpreting models in real-world contexts


## 11

$$
110 x+y=1,210
$$

A coffee shop is running a promotion where a number of free coffee samples are given away each day. The equation above can be used to model the number of free coffee samples, $y$, that remain to be given away $x$ days after the promotion began. What does it mean that $(11,0)$ is a solution to this equation?
A) During the promotion, 11 samples are given away each day.
B) It takes 11 days during the promotion to see 1,210 customers.
C) It takes 11 days during the promotion until none of the samples are remaining.
D) There are 11 samples available at the start of the promotion.

$$
n=456-3 T
$$

The equation above is used to model the relationship between the number of cups, $n$, of hot chocolate sold per day in a coffee shop and the average daily temperature, $T$, in degrees Fahrenheit. According to the model, what is the meaning of the 3 in the equation?
A) For every increase of $3^{\circ} \mathrm{F}$, one more cup of hot chocolate will be sold.
B) For every decrease of $3^{\circ} \mathrm{F}$, one more cup of hot chocolate will be sold.
C) For every increase of $1^{\circ} \mathrm{F}$, three more cups of hot chocolate will be sold.
D) For every decrease of $1^{\circ} \mathrm{F}$, three more cups of hot chocolate will be sold.

A truck enters a stretch of road that drops 4 meters in elevation for every 100 meters along the length of the road. The road is at 1,300 meters elevation where the truck entered, and the truck is traveling at 16 meters per second along the road. What is the elevation of the road, in meters, at the point where the truck passes $t$ seconds after entering the road?
A) $1,300-0.04 t$
B) $1,300-0.64 t$
C) $1,300-4 t$
D) $1,300-16 t$

## Basic and Intermediate Statistics Interpretation

## - MAJOR emphasis on

- Graph reading \& information gathering from charts
- Understanding line of best fit

9
Dimensions of Envelopes


The scatterplot above shows the widths and the heights of 12 types of rectangular envelopes. What is the width, in inches, of the envelope represented by the data point that is farthest from the line of best fit (not shown)?
A) 2
B) 5
C) 7
D) 12

13


The histogram above shows the distribution of the heights, in meters, of 26 pyramids in Egypt. Which of the following could be the median height of the 26 pyramids represented in the histogram?
A) 44 meters
B) 48 meters
C) 63 meters
D) 77 meters

15
In 2012 the total population of individuals in the United States who were between 14 and 17 years old (inclusive) was about 17 million. If the survey results are used to estimate information about summer employment of teenagers across the country, which of the following is the best estimate of the total number of individuals between 16 and 17 years old in the United States who had a summer job in 2012 ?
A) $8,200,000$
B) $3,900,000$
C) $2,000,000$
D) 390,000

|  | Have a <br> summer job | Do not have a <br> summer job | Total |
| :--- | :---: | :---: | ---: |
| Ages $14-15$ | 20 | 69 | 89 |
| Ages $16-17$ | 39 | 42 | 81 |
| Total | 59 | 111 | 170 |

## Quadratics

$$
2 x^{2}+7 x-15=0
$$

- Significant Emphasis on Quadratics
- Understanding algebraic and graphical relationship between standard form, factors, and roots
- Graphs of polynomial functions
- Will be mostly more difficult questions

28


The $x y$-plane above shows one of the two points of intersection of the graphs of a linear function and a quadratic function. The shown point of intersection has coordinates $(v, w)$. If the vertex of the graph of the quadratic function is at $(4,19)$, what is the value of $v$ ?

## Mathematics Suggestions

- Redouble efforts to bolster your basic and intermediate algebra skills
- "Algebraic gymnastics"
- You should be comfortable reading two-way tables and graphical figures
- Emphasize proportional reasoning
- Will be useful for linear relationships and converting
- Know your mean, median, and standard deviation
- E.g., how manipulating the data can or can't change the mean; working with weighted averages; frequency histograms


## SAT - Evidence-Based Writing

- Formulate arguments based on a provided document
- No more "making things up"
- Essay Structure \& Scoring
- 50 min
- 3 sub-scores graded on 0-8 scale
- Suggestion: consider elements of persuasion prior to test
- Language choice, rhetorical style, irony, sarcasm, appeal to emotion, logic, etc.

Part III

The ACT

## ACT Overview

## English

75 questions
45 minutes

## Math

60 questions
60 minutes

## Reading

Science

- Questions more straightforward
- English is the same as SAT Writing \& Language section
- Science isn't really "science" - it's glorified reading comprehension with charts and graphs
- All section scores out of 36; averaged for composite out of 36
- Optional Essay at end of test - 40 min , response integrating perspectives; graded out of 36, but does not affect the composite score


## Math - Some More Stats and Probability

- There has been a slight increase in the proportion of basic statistics and probability questions
- Mean, median, mode, range, basic probability of events
- Greater emphasis on "STEM"-related problems more likely to be encountered in college
- Still a majority emphasis on algebral and II and geometry
- Questions more straightforward than SAT math questions


53. A box contains 6 identically sized, solid-colored balls. One ball is green, 2 are yellow, and 3 are red. A ball is drawn at random and returned to the box, then a second ball is drawn at random. What is the probability that the first ball is red and the second ball is green?
A. $\frac{1}{12}$
B. $\frac{1}{10}$
C. $\frac{1}{3}$
D. $\frac{2}{3}$
E. $\frac{7}{10}$

## Reading - Paired Passages

- Reading test features 4 passages with 10 questions each, to be completed in 35 min
- One of the four passages now is "paired"
- Questions apply to one or the other passage, or both
- Hasn't significantly increased difficulty - aligns with SAT Reading
- Questions concern main idea, vocab in context, inference, details


## Questions 11-13 ask about Passage A.

1. Which of the following matements about automobiles in San Francisco in 1903 is best sopported by
Passage A?
A. They wer
A. They wete affordable for the average citizen but
B. They were used more by tourists for sightsecing

- They failed to capture the public imal purposes.
D. They of hage public relations efforts. - They were considered a public nui
a small segment of the population.

2. Which of the following terms in Passage $A$ is used
more figuratively than literally? more figuratively th
F. Puddles (line 11)
H. Bells (line 18)
J. Hills (line 39)
3. The purpose of the quotation marks around the word accessories io tine 29 is most likely to:
A. suggest that the features were actually essentials.
B. indicate that the word appeared in legal document.
C. emphasize that the word was widely misunderstood
D. clarify that inexpensive automobiles had some uxury features.

Questions 14-17 ask about Passage B.
Which of the following statements best captures how
It happened gradually and went unnoticed at the
time by the public.
G. It happened quiekly despite promising initial sales
H. It was on a huge scale, occurred swiftly, and was a
J. It occurred when other automakers were doing

The statement in lines 43-45 is typical of Passage B in the way it:
A. contrasts data about the Edsel with data about
other cars of the 1950s.
B. conveys the obligation that Ford execu Edsel.
involve consumers in the design of the Edice
C. combines an industry perspective on the Edse
with that of the typical consumer
suggests the entire Edsel enterprise was marked by
extremes.
16. Which of the following events referred to in Passage Which of the fotlowing events
F. E-Day ended.
G. The siock market plunged.
H. Edsel sales dropped below 45,000 .
H. Edsel sales stropped below 45,00
17. As it is used in the passage, the term premium cars (ine xo) serves primarily as a
A. reference to what Edsels have become now that
B. thame for a vape of car that was ushered in by the
C. Iakel for a category of cars that the makers of the
C. Label for a eategory of cars that the makers of the
Edsel intended it to belong to.
.
D. derisive term used sarcastically by Edsel
who were disappointed in their purchase.

## Questions $18-20$ ask about both passages

18. A similarity between the two passages is that they F. examine their topics from a significant distance of
G. reveal the author's professional backgroand as a H. way of lending credubility to the tert. H. assert that automobiles have contributed liule that J. incorporate information about traffic and road con
ditions into a discussion of automobile design.
19. An element of Passage A that is not present in Passage B is a
cultare?
A. Related legislation
B. Public opinion
C. Economics
D. Quotations from industry experts
20. If publicity experts had been assigned to build enthusiasm for the carsed in Passage B, the experts would methods described in Passage B, the experrs woold
most likely have first released photos to the press that howed:
E. cars going up Nineteenth Avenue in San Francisco. polished door suedle. as a gleaming headight
H. The meticulous wark done along the assembly line
J. an attractive young couple smiling as they enjoy a car ride past horses grazing io pastures.

## Science

- Six passages to be completed in 35 minutes.
- Passages contain between 5 and 7 questions.
- Primarily reading comprehension of charts, graphs, and text.
- The science can be anything (i.e. Biology, Chemistry, Environmental Science, etc.) but a student does not need to have taken the class.
- Greater prevalence of "experimental procedure" questions, but overall, there is lots of graph and chart interpretation


## ACT - Essay

- The "New" ACT Essay is not that much different from the old one - 40 minutes now
- Pick a side (just like the old one), but address each of the positions as it aligns with/conflicts with your position
- Now on 1-36 scale


## Perspective One

What we lose with the replacement of people by machines is some part of our own humanity. Even our mundane daily encounters no longer require from us basic courtesy, respect, and tolerance for other people.

Perspective Two
Machines are good at low-skill, repetitive jobs, and at high-speed, extremely precise jobs. In both cases they work better than humans. This efficiency leads to a more prosperous and progressive world for everyone.

## Perspective Three

Intelligent machines challenge our
long-standing ideas about what humans are or can be. This is good because it pushes both humans and machines toward new, unimagined possibilities.

## Essay Task

Write a unified, coherent essay in which you evaluate multiple perspectives on the increasing presence of intelligent machines. In your essay, be sure to:

- analyze and evaluate the perspectives given
- state and develop your own perspective on the issue
- explain the relationship between your perspective and those given

Your perspective may be in full agreement with any of the others, in partial agreement, or wholly different. Whatever the case, support your ideas with logical reasoning and detailed, persuasive examples.

## Part IV

A Logical Prep Timeline and
How to Prepare

## A Smart Timeline for Prep

## SAT

- Juniors: Start prepping now
- Shoot for March or May exam
- Sophomores: Start prepping this summer
- Shoot for August or October exam
- Seven exams throughout the year
- Question-Answer Service (QAS)
- March
- May
- October

ACT

- Juniors: Start prepping now
- Shoot for April or June exam
- Sophomores: Start prepping this summer
- Shoot for September exam
- Seven exams throughout the year (July not offered in NY)
- Test Information Release (TIR)
- December
- April
- June


## Prep Suggestions

- Practice early and often by taking timed sections
- Take full-length practice tests
- Find a comprehensive prep resource
- Know that just a few questions can make a huge difference


## MTP Online

- Complete SAT and ACT courses
- Lessons, quizzes, audio/video explanations, vocab builder
- Go at your own pace, access from anywhere with internet


## A Structured Checklist of Tasks

## Week 2

6. Take the Reading Evaluation (approx. 25 min.)
7. Take the Math Evaluation (approx. 25 min.)
8. Take the Writing and Language Evaluation (approx. 25 min .)
9. Math Lesson \#1: Plug in Numbers (approx. 15 min.)

## Week 3

10. Reading Lesson \#1: Best Reading Practices (approx. 15 min .)
11. Writing and Language Lesson \#1: Subject Verb Agreement (approx. 15 min .)
12. Math Lesson \#2: Literal Equations (approx. 15 min.)
13. Reading Lesson \#2: Strategy for Vocab in Context (approx. 15 min .)

## Rich, Engaging Lessons

```
2. When you have a triangle whose sides are the radii of a circle, the triangle is isosceles or MAYBE
equilateral. We'll get to the "maybe" part in the example problems, but here's the bottom line: any triangle
with equal sides will also have equal angles. For example, in the figure below, AO=OB, so <A= <B, making
an isosceles triangle.
```



```
3. When a circle is "rolled" on its outer edge, or when the total distance around the circle must be calculated, the factor under consideration is its circumference. The distance covered by a circle that rolls once around on a straight line is equal to the circle's circumference. For example, in the figure below, the circumference of the circle is 6 units, so in one roll, it would cover a distance equal to its circumference. Since
\[
C=\pi d
\]
this would be a total length of \(6 \pi\).
```



```
4. To find the area of a shaded region, find the area of the largest figure, and subtract the area of the part
```


## Instant-Feedback Quizzes



## Even More Features!

- Full-length exams
- Concept summary reports - highlight strengths and weaknesses
- Quiz on-demand
- Vocabulary Builder


## What Else from MTP?

- Completely interactive web-based courses and tutoring
- SAT \& ACT "Miniseries" provides focus the week before tests
- Incredible support


# Babylon High School Spring 2019 SAT/ACT Course <br> PREPARATION FOR THE APRIL 13 ACT AND MAY 4 SAT Twelve 2-Hour Classes Mondays and Wednesdays - 7 to 9 pm at Babylon High School 

March 13, 18, 20, 25, 27 April 1, 3, 8, 15, 17, 29

May 1

Cost: \$375
Required Texts (available online and at local bookstores): The Official SAT Study Guide, 2018 Edition by The College Board The Official ACT Prep Guide, 2018-2019 Edition by Wiley

Registration: www.methodtestprep.com/babylon
Visit www.act.org to register and pay for the ACT. The deadline to register for the April 13 exam is March 8. Visit www.collegeboard.org to register and pay for the SAT. The deadline to register for the May 4 exam is April 5.

All Babylon High School students have free access to the Method Test Prep web program.Visit the registration page for information on how to create and access a free account.
Questions? Contact Kevin Dennis
kdennis@methodtestprep.com/516-597-4997

## Thanks for Listening!

## Questions?

kdennis@methodtestprep.com

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51 \text { 6-597-4997 }
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