

Using Naviance in the STEM Classroom



What is Naviance?

- College Search and Application software

Sacred Heart Academy Logged in as: Suite Sacredheart (log out) Manage my account

family connection

colleges careers about me

search for colleges: Go

colleges I'm thinking about
[+ add to this list](#) / [compare this](#)

MORE SEARCH OPTIONS

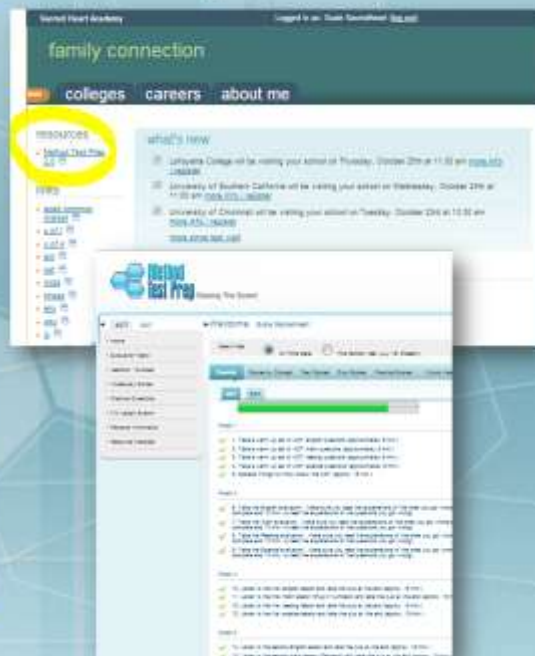
	College	Delivery type	Added By	My Interest	Application Deadlines†			Regular Decision	Actions		
					Early Decision	Early Action	Priority		DETAILS	SAVE	ADD
my colleges:	<input checked="" type="checkbox"/> Auburn Univ		student	Low	-	10/1	-	2/1			
> colleges I'm thinking about	<input checked="" type="checkbox"/> Ballantine U.		student	High	-	11/1	2/1	-			
> colleges I'm applying to	<input checked="" type="checkbox"/> U of Kentucky		student	Low	-	1/15	-	-			
> college visits	<input checked="" type="checkbox"/> U of Louisville		student	High	-	-	-	1/15			
college research	<input checked="" type="checkbox"/> Miami Univ. Oxford		student	High	11/15	12/1	-	2/1			
> SuperMatch™ college search	<input checked="" type="checkbox"/> U of North Carolina		student	First Choice	-	11/1	-	12/31			
> college match	<input checked="" type="checkbox"/> Rhodes Coll		student	Medium	11/1	11/15	-	1/15			
> college compare											

Update Interest Move to Application List Remove from List

Method Test Prep- Intro

In-depth coverage of all SAT and ACT sections

- SAT
 - Math: algebra I/II, geometry, logical reasoning
 - Critical Reading: vocabulary, passage-based reading
 - Writing: grammar
- ACT
 - English: grammar and rhetorical skills
 - Math: algebra I/II, geometry, trigonometry
 - Reading: passage-based comprehension
 - Science: inference, logical reasoning



Method Test Prep- Intro

- Manageable, resource-rich material
 - Short, focused, engaging tasks
 - Lessons, quizzes, vocabulary builder
 - Evaluations and full-length exams
 - Audio and video problem explanations
 - On-demand, student/teacher-created and assigned quizzes
- Organization and metrics tools for instructors/administrators
 - Progress monitoring at class, student, and conceptual levels

Test Prep – ACT and SAT

How important are the tests?

- Fall of senior year, students will need scores to apply for college
- PSAT taken in junior year is National Merit Scholarship Qualifier
- 60% of colleges attribute “considerable importance” to college admissions tests (ACT/SAT) in the admissions decision, and it was the third most important factor overall.

(NACAC’S State of College Admissions Report, 2011)

The College Counselors strongly suggest that juniors take two standardized tests during junior year. An ACT and SAT and or two ACT tests. Depending on scores, you may then be finished with testing.

Scheduling

- Content should be spread out over time
 - Gradual progress rather than cramming
 - Factor in school breaks/holidays

Test & Date	Recommended Start Month
November SAT	Sep
January SAT	Oct-Nov
March SAT	Dec-Jan
April ACT	Jan-Feb
May SAT	Mar
June SAT/June ACT	Apr

- Recommendation: two standardized tests in junior year
- Practice tests such as the EXPLORE and PLAN may start as soon as 8th or 9th grade

Test Prep – ACT and SAT

Why incorporate test prep into my classroom?

- Study TIME is an issue!
- Students work best when they have real connections to the material
- Students form a relationship with their teacher that facilitates learning

- One of the biggest reasons that students don't prepare for the ACT or SAT is because they don't have the time. Setting aside time for studying is essential to scoring well. However, in addition to good scores, students need top grades and well-rounded student resume that requires plenty of extracurricular activities.
- In order for students to really learn, they need to form a connection to their work. A teacher-led online course gives students this connection to a human at the other end of the computer, and thus they are less likely to get lost in cyberspace.
- Students form a relationship with their teacher and have a picture of them in their minds and hear their voices, even while working remotely. They can then use this picture and voice of their teacher to develop the capacity to follow through on completing assignments while they work independently outside of class time.

Math ACT Prep – what to study

- Arithmetic and Algebra: Variables & Plugging in Numbers
- Arithmetic and Algebra: Word Problems and Plugging In
- Arithmetic and Algebra: Operations
- Arithmetic and Algebra: Strange Symbols
- Arithmetic and Algebra: Statistics and Probability
- Arithmetic and Algebra: Statistics and Probability
- Geometry: Circles, Angles, Area, Perimeter, Solids
- Coordinate Geometry
- Functions
- Algebra II: Logarithms, Matrices, Imaginary & Complex Numbers
- Trigonometry: Basic functions and calculations, Laws of sines/cosines, Unit circle

Arithmetic and Algebra: Variables & Plugging in Numbers

SAT

If x is divisible by 3 and y is divisible by 5, which of the following must be divisible by 15?

- I. xy
 - II. $3x + 5y$
 - III. $5x + 3y$
- (A) I only
(B) III only
(C) I and II only
(D) I and III only
(E) I, II, and III

ACT

Which of the following is true for all consecutive integers m and n such that $m < n$?

- (A) m is odd
(B) n is odd
(C) $n - m$ is even
(D) $n^2 - m^2$ is odd
(E) $m^2 + n^2$ is even

- Strategy:** Plugging in Numbers – one of the most crucial techniques
- Both problems, while ranked “medium” difficulty, can be solved easily by substituting appropriate numbers for variables
- Multi-case options are common on SAT, not on ACT

Arithmetic and Algebra: Word Problems and Plugging In

SAT

A hotel charges a service fee of \$1.00 per day to use its copy machine. In addition, there is a charge of \$0.10 per copy made. Which of the following represents the total charge, in dollars, to use this copy machine to make n copies in one day?

- (A) $0.90n$
- (B) $1.10n$
- (C) $1.00 + 10n$
- (D) $1.00 + 0.10n$
- (E) $1.00 + 0.10 + n$

ACT

The fixed costs of manufacturing basketballs in a factory are \$1,400.00 per day. The variable costs are \$5.25 per basketball. Which of the following expressions can be used to model the cost of manufacturing b basketballs in 1 day?

- (A) $\$1,405.25b$
- (B) $\$5.25b - \$1,400.00$
- (C) $\$1,400.00b + \5.25
- (D) $\$1,400.00 - \$5.25b$
- (E) $\$1,400.00 + \$5.25b$

- Strategy:** Plugging in Numbers for students with weaker algebraic reasoning skills
- “Easy” problems that should be givens for any student
- This kind of problem is common for SAT grid-in questions with definite numbers

Arithmetic and Algebra: Operations

SAT

If $m^x \cdot m^7 = m^{28}$ and $(m^5)^y = m^{15}$, what is the value of $x + y$?

- (A) 7
- (B) 12
- (C) 14
- (D) 24
- (E) 31

ACT

$(3x^3)^3$ is equivalent to:

- (A) x
- (B) $9x^6$
- (C) $9x^9$
- (D) $27x^6$
- (E) $27x^9$

- ACT: straightforward – similar to quiz or homework problems
- SAT: problems require a combination of operations
- Technique:** laws of exponents
- Exponents, FOIL & factoring, radicals & roots tested on both exams
- Strategy example:** always factor difference of perfect squares

Arithmetic and Algebra: Strange Symbols

SAT

Let the operation \Rightarrow be defined by $a \Rightarrow b = \frac{a+b}{a-b}$
for all numbers a and b , where $a \neq b$.
If $1 \Rightarrow 2 = 2 \Rightarrow x$, what is the value of x ?

- (A) 4
- (B) 3
- (C) 2
- (D) 1
- (E) 0

ACT

Charles defined a new operation, \diamond , on pairs of ordered pairs of integers as follows: $(a, b) \diamond (c, d) = \frac{ac+bd}{ab-cd}$.
What is the value of $(2, 1) \diamond (3, 4)$?

- (A) -2
- (B) -1
- (C) 2
- (D) 5
- (E) 10

- **Technique:** use position as guide.
 - Ex. The “stuff” on the left side of the arrow goes everywhere there is an a in the formula
- Emphasize similarity to functions
- Most students are thrown by “new” operations – they must know that all that is required is to follow directions

Arithmetic and Algebra: Statistics and Probability

SAT

A bag contains only red marbles, blue marbles, and yellow marbles. The probability of randomly selecting a red marble from this bag is $\frac{1}{4}$, and the probability of randomly selecting a blue marble is $\frac{1}{6}$. Which of the following could be the total number of marbles in the bag?

- (A) 10
- (B) 12
- (C) 18
- (D) 20
- (E) 30

ACT

An integer from 100 through 999, inclusive, is to be chosen at random. What is the probability that the number chosen will have 0 as at least 1 digit?

- (A) $\frac{19}{100}$
- (B) $\frac{81}{100}$
- (C) $\frac{90}{100}$
- (D) $\frac{171}{900}$
- (E) $\frac{271}{1,000}$

- Technique:** stress that total # of elements must be multiple of denominator(s)
- “Part / Whole” concept employed in simple and difficult situations
- Independent events, dependent events (“without replacement” problems)

Arithmetic and Algebra: Statistics and Probability

SAT

N is a set of numbers whose average (arithmetic mean) is 3. M is a set that is generated by doubling each number in N . What is the average of the numbers in set M ?

- (A) $\frac{1}{3}$
- (B) 2
- (C) 3
- (D) 6
- (E) 9

ACT

Tom has taken 5 of the 8 equally weighted tests in his U.S. History class this semester, and he has an average score of exactly 78.0 points. How many points does he need to earn on the 6th test to bring his average score up to exactly 80.0 points?

- (A) 90
- (B) 88
- (C) 82
- (D) 80
- (E) 79

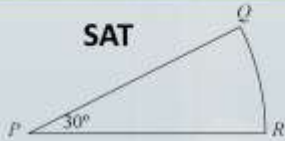
•**Technique:** students must write down the formula for arithmetic mean (Avg = sum of numbers / # of terms)

•**Strategy:** encourage students to create a small set of numbers to test when necessary (this is a very useful SAT strategy)

•**Strategy:** first, phrase everything in terms of the average equation; next, cross-multiply

Geometry: Circles

SAT



In the figure above, QR is the arc of a circle with center P . If the length of arc QR is 6π , what is the area of sector PQR ?

- (A) 108π
- (B) 72π
- (C) 54π
- (D) 36π
- (E) 9π

ACT

A circular pool cover shown above has a radius of 4 meters and has two notches located at points A and B . If the distance between the notches is π meters, what is the measure of the angle marked θ ?

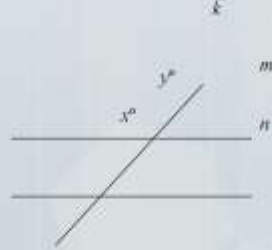


- (A) 15°
- (B) 30°
- (C) 45°
- (D) 60°
- (E) 75°

- Technique:** circle proportions and finding fractions of figures
- Proportionality, application of formulas involved in both problems

Geometry: Angles

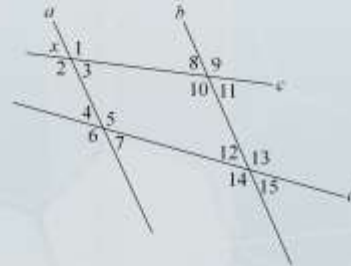
SAT



In the figure above, $m \parallel n$ and $y = 3x$. What is the value of y ?



ACT



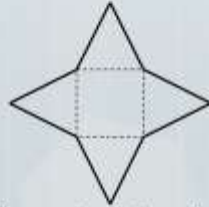
Lines a , b , c , and d are shown above and $a \parallel b$. Which of the following is the set of all angles that *must* be supplementary to $\angle x$?

- (A) $\{1, 2\}$
- (B) $\{1, 2, 5, 6\}$
- (C) $\{1, 2, 9, 10\}$
- (D) $\{1, 2, 5, 6, 9, 10\}$
- (E) $\{1, 2, 5, 6, 9, 10, 13, 14\}$

- Parallel line geometry: supplements, corresponding, alternate interior, vertical angles
- Usually also appear in parallelograms and trapezoids (parallel sides/bases and supplementary consecutive angles)

Geometry: Area, Perimeter, Solids

SAT



If the area of the square in the figure above is 81 and the perimeter of each of the 4 triangles is 30, what is the perimeter of the figure outlined by the solid line?

- (A) 36
- (B) 72
- (C) 80
- (D) 84
- (E) 120

ACT



The figure above is composed of square $BCDE$ and equilateral triangle $\triangle ABE$. The length of \overline{CD} is 6 inches. What is the perimeter of $ABCDE$, in inches?

- (A) 18
- (B) 24
- (C) 30
- (D) 42
- (E) 45

- Students must integrate various principles of geometry in a single problem: area, perimeter, terminology: ACT more straightforward
- Technique:** students MUST mark figure to maximum possible extent
- Common figures are quadrilaterals, right, isosceles, and equilateral triangles, circles, spheres, cubes, rectangular prisms

Coordinate Geometry

SAT

Line ℓ has a positive slope and passes through the point $(0, 0)$. If line k is perpendicular to line ℓ , which of the following must be true?

- (A) Line k passes through the point $(0, 0)$.
- (B) Line k has a positive slope.
- (C) Line k has a negative slope.
- (D) Line k has a positive x -intercept.
- (E) Line k has a negative y -intercept.

ACT

Which of the following is the slope of a line parallel to the line $y = \frac{2}{3}x - 4$ in the standard (x, y) coordinate plane?

- (A) -4
- (B) $-\frac{1}{2}$
- (C) 2
- (D) $\frac{1}{2}$
- (E) $\frac{3}{2}$

- Large emphasis on parallel/perpendicular slope relationships
- Substituting coordinates into equations to solve for unknown coordinates/slopes/intercepts
- Figures in the coordinate plane, especially circles and triangles
- **Technique:** students should be aware that if there is a question involving equations and points, they will need to plug coordinates into equations (students very typically forget they can do this)

Functions

SAT

If $f(x) = \frac{3 - 2x^2}{x}$ for all nonzero x , then $f(2) =$

- (A) $\frac{11}{2}$
- (B) $\frac{7}{2}$
- (C) $-\frac{1}{2}$
- (D) $-\frac{5}{2}$
- (E) -7

ACT

Given $f(x) = 4x + 1$ and $g(x) = x^2 - 2$, which of the following is an expression for $f(g(x))$?

- (A) $-x^2 + 4x + 1$
- (B) $x^2 + 4x - 1$
- (C) $4x^2 - 7$
- (D) $4x^2 - 1$
- (E) $16x^2 + 8x - 1$

- SAT**: understanding function notation & simple operations in both algebraic and graphical contexts (i.e. points, transformations)
- ACT**: adds in composition of functions
- Strategy**: make sure students know notation, understand that $y=f(x)$

Science ACT Prep- what to study

Assumptions:

- 3 years + of college-prep core science study
- Coursework in Earth science and/or physical science and biology.

The test presents sets of scientific information followed by a number of multiple-choice test questions.

- Three possible formats:
 - data representation (graphs, tables, and other schematic forms)
 - research summaries (descriptions of one or more related experiments)
 - conflicting viewpoints (expressions of several related hypotheses or views that are inconsistent)
- The questions require you to:
 - recognize and understand the basic features and concepts
 - examine relationships
 - generalize from given information

The content of the Science Test includes biology, chemistry, physics, and the Earth/space sciences (for example, geology, astronomy, and meteorology). Advanced knowledge in these subjects is not required, but background knowledge acquired in general, introductory science courses is needed to answer some of the questions. The test emphasizes **scientific reasoning skills** over recall of scientific content, skill in mathematics, or reading ability.

Science ACT Prep- what to study

Data Representation (38%)

Ion	Molar mass (g/mole)	Distance traveled (cm)	Rf	Spot color
Nickel (Ni^{2+})	58.7	0.8	0.08	pink
Cobalt (Co^{2+})	58.9	3.5	0.35	brown-black
Copper (Cu^{2+})	63.5	6.0	0.60	blue
Cadmium (Cd^{2+})	112.4	7.8	0.78	yellow
Mercury (Hg^{2+})	200.6	8.5	0.85	brown-black

Table 1 adapted from Thomas McCubagh, CSC, and Marissa Curlee, "Qualitative Analysis of Cations Using Paper Chromatography," ©1993 by the American Chemical Society.

Based on the information in Table 1, to best identify a metal ion using paper chromatography, one should know the:

- A. spot color for the ion only.
- B. distance the solvent traveled only.
- C. Rf value and spot color for the ion only.
- D. distance the solvent traveled and spot color of the ion only.

This format presents graphic and tabular material similar to that found in science journals and texts.

The questions associated with this format measure skills such as graph reading, interpretation of scatterplots, and interpretation of information presented in tables,

diagrams, and figures.

Science ACT Prep- what to study

Research Summaries (45%)

Experiment 1

When hydrogen chloride (HCl) and ammonia (NH₃) vapors react, they form solid ammonium chloride (NH₄Cl):



A swab soaked with HCl solution was inserted into one end of a glass tube (1 cm diameter), and, simultaneously, a swab soaked with NH₃ solution was inserted into the other end, so that the swabs were 10 cm apart. The distance that each vapor traveled could be determined because, at the point they made contact, a white ring of NH₄Cl formed (see Figure 1). The reaction was done at different temperatures. The time it took for the ring to start to form and its distance from the HCl swab were measured for each trial (see Table 1).

Experiment 2

Experiment 1 was repeated, but the temperature was held constant at 20°C and the diameter of the tube was varied for each trial (see Table 2).

Which of the following best describes the difference between the procedures used in Experiments 1 and 2? In Experiment 1, the

- A. temperature was varied; in Experiment 2, the diameter of the tube was varied.
- B. diameter of the tube was varied; in Experiment 2, the temperature was varied.
- C. distance between the swabs was varied; in Experiment 2, the temperature was varied.
- D. temperature was varied; in Experiment 2, the distance between the swabs was varied.

This format provides descriptions of one or more related experiments.

The questions focus on the design of experiments and the interpretation of experimental results.

Science ACT Prep- what to study

Conflicting Viewpoints (17%)

Passage 1

Unmanned spacecraft taking images of Jupiter's moon Europa have found its surface to be very smooth with few meteorite craters. Europa's surface ice shows evidence of being continually resmoothed and reshaped. Cracks, dark bands, and *pressure ridges* (created when water or slush is squeezed up between 2 slabs of ice) are commonly seen in images of the surface. Two scientists express their views as to whether the presence of a deep ocean beneath the surface is responsible for Europa's surface features.

Scientist 1

A deep ocean of liquid water exists on Europa. Jupiter's gravitational field produces tides within Europa that can cause heating of the subsurface to a point where liquid water can exist. The numerous cracks and dark bands in the surface ice closely resemble the appearance of thawing ice covering the polar oceans on Earth. Only a substantial amount of circulating liquid water can crack and rotate such large slabs of ice. The few meteorite craters that exist are shallow and have been smoothed by liquid water that oozed up into the crater from the subsurface and then quickly froze.

Jupiter's magnetic field, sweeping past Europa, would interact with the salty, deep ocean and produce a second magnetic field around Europa. The spacecraft has found evidence of this second magnetic field.

Scientist 2

No deep, liquid water ocean exists on Europa. The heat generated by gravitational tides is quickly lost to space because of Europa's small size, as shown by its very low surface temperature (-160°C). Many of the features on Europa's surface resemble features created by flowing glaciers on Earth. Large amounts of liquid water are not required for the creation of these features. If a thin layer of ice below the surface is much warmer than the surface ice, it may be able to flow and cause cracking and movement of the surface ice. Few meteorite craters are observed because of Europa's very thin atmosphere; surface ice continually sublimates (changes from solid to gas) into this atmosphere, quickly eroding and removing any craters that may have formed.

According to the information provided, which of the following descriptions of Europa would be accepted by both scientists?

F. Europa has a larger diameter than does Jupiter.

G. Europa has a surface made of rocky material.

H. Europa has a surface temperature of 20°C .

J. Europa is completely covered by a layer of ice.

This format presents expressions of several hypotheses or views that, being based on differing premises or on incomplete data, are inconsistent with one another.

The questions focus on the understanding, analysis, and comparison of alternative viewpoints or hypotheses.

**SAT does NOT have a
Science Component**

Why Method Test Prep?

- Prep for standardized tests is crucial
 - Predictability warrants preparation
- A course based on MTP's program will be:
 - User-friendly
 - Up-to-date, with high-quality material
 - Flexible for instructors and students
 - Results-oriented

With Method Test Prep students can:

- Hear audio explanations of test questions
- Access strategy guides for each test
- Complete full-length practice tests
- Receive hundreds of practice questions
- Read easy explanations to every question
- Track their strengths on each test
- Receive valuable test-taking tips
- Take practice quizzes to boost their knowledge
- Access their courses on an unlimited, 24x7 basis, from any Web-enabled computer

Method Test Prep

- **Student view**

- Checklist
- Practice Questions
- Quizzes and Tests
- Audio/Video Explanations
- Seeing results/scores

- **Teacher view**

- Create a Class
- Create a Quiz
- Assign a Quiz
- Seeing student results/scores
- Lesson Plans
- Resource Materials

Reinforcement: Creating and Assigning Quizzes

- For most effective prep, *students must complete assignments*
- To create a customized quiz, go to “Manage Quizzes” → “Add a Quiz” in left-side directory
- Complete “Add a Quiz” dialogue boxes to assign selected content

› Manage Quizzes	View/Assign Quizzes
› Manage Emails	Add A Quiz

Name of Quiz: *	Number of Questions: *
ACT Science 1	5
usage:	
<input checked="" type="radio"/> Quiz <input type="radio"/> Test	
Program: *	Subject:
ACT	Science
Question Type:	Concepts
Passage	Basic Math (Percents, Ratios)
	Inferential Reasoning
	Interpreting Charts
	Interpreting Graphs
Please see the Question Text below	
Between which two years was the increase in the number of people who were approximately 10 years old?	Test or Question set:

Reinforcement: Creating and Assigning Quizzes




- Return to “View/Assign Quizzes” and assign quiz to your class
- Students can create quizzes on demand

Manage Quizzes View/Assign Quizzes
Manage Emails Add A Quiz

ASSIGN TO CLASS				Lacie Mayes 1 SAT Prep
<input type="checkbox"/>	Name of Quiz	Number of Questions	Question Type	Class
<input type="checkbox"/>	Test Quiz	2		View
<input type="checkbox"/>	Practice Quiz	5		View
<input type="checkbox"/>	trouble	6	Multiple Choice	View
<input type="checkbox"/>	math hard	5		View
<input type="checkbox"/>	Chevy's Demo Quiz	5		View
<input type="checkbox"/>	Sentence Comp	5	Multiple Choice	View

Seeing student results

Concept Summary Reports

Improper Verb Form	SAT Writing		2	2	100.00%	58.90%	41.10%
Improving Paragraphs	SAT Writing		10	23	43.48%	46.09%	-2.62%
Improving Sentences	SAT Writing		19	42	45.24%	60.43%	-15.19%

- Use to determine relative strengths and weaknesses on a class level
- Compare to MTP norms
- Know where to focus for reinforcement

Tracking Success

Individual Student Progress

w	78	10/13/2011 - 11:35:43 AM	472	281	211	55.30	153	48	✓
w	6	07/18/2011 - 02:52:32 PM	47	28	19	59.57	0	7	✓
w	4	07/22/2011 - 02:23:56 PM	50	17	33	34.00	0	4	✓
w	6	06/08/2011 - 01:10:00 PM	102	54	48	52.94	45	16	✓

- Monitor students' quiz scores, logins, words mastered, % correct, and more

Course Checklist

- Comprehensive structure for all SAT and ACT sections
- Clickable links lead to lessons and quizzes
 - Lessons are full of worked example problems with full audio
 - Quizzes offer brief reinforcement with instant feedback & audio and video explanations
- Most important material at the start
- Follow the checklist in any order
- Assign lessons and quizzes in class and for homework

Week 4

14. Listen to the first sentence completion lesson (Three Basic Steps to the end (approx. 10 min.)
15. Listen to the third math lesson (Strange Symbols) and take the quiz
16. Listen to the third writing lesson (Parallel Sentence Structure) and take the quiz
17. Get 15 more words into your Words Mastered column for a total of 150

Now, we know that the cost of a slice of pizza, P , is \$3.00. Plug this back into one of the original equations to solve for S , the cost of a drink.

$$4(3.00) + 2S = 12.50$$

$$12.00 + 2S = 12.50$$

$$2S = 0.50$$

$$S = \boxed{\$0.25}$$

C. 8

D. 8/6

E. 10

The correct answer is D. The answer you entered was C.

Working With the Checklist: Path to Success

- Instructor may do a chalkboard mini-lesson or problem session based on the checklist lessons
 - Problems can be drawn from MTP's *Practice Questions* section, or from books
 - SAT: *The Official SAT Study Guide*, 2nd ed.
 - ACT: *The Real ACT Prep Guide*, 3rd ed.
- Depending on school resources, class time can be split between board and computer work
 - Checklist assignments can be given by number

Example Lesson: Plan

- SAT Math: Strange Symbols
 - 1st 15 min: students work independently on Strange Symbols lesson and quiz online
 - Learn technique
 - Practice problems
 - Audio/video explanations
 - 2nd 15 min: instructor can pull problems from MTP question database or *Official SAT Study Guide*
 - Great for demonstrating anticipated student questions and problems with twists
 - Example: p. 456 #15 in *OSSG*; “quadruple” problem in MTP online database

Example Lesson: Discussion Questions

From the MTP Online Program

Let a “ g -quadruple” be defined as $(2g, g, 3g/5, g/2)$.
Which of the following is a g -quadruple?

- (A) $(60, 30, 40, 20)$
- (B) $(140, 70, 42, 35)$
- (C) $(50, 80, 30, 40)$
- (D) $(45, 90, 70, 60)$
- (E) $(90, 180, 20, 360)$

MTP anticipates language-based
“spins” on problems

Link to Presentation & Lesson Plans

<https://www.dropbox.com/sh/1ptopowwoicygch/JLVv57AJVn>