

# **Township of Union Public School District Middle School English & Math PARCC Presentation**

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**November 2014**

# Test Dates

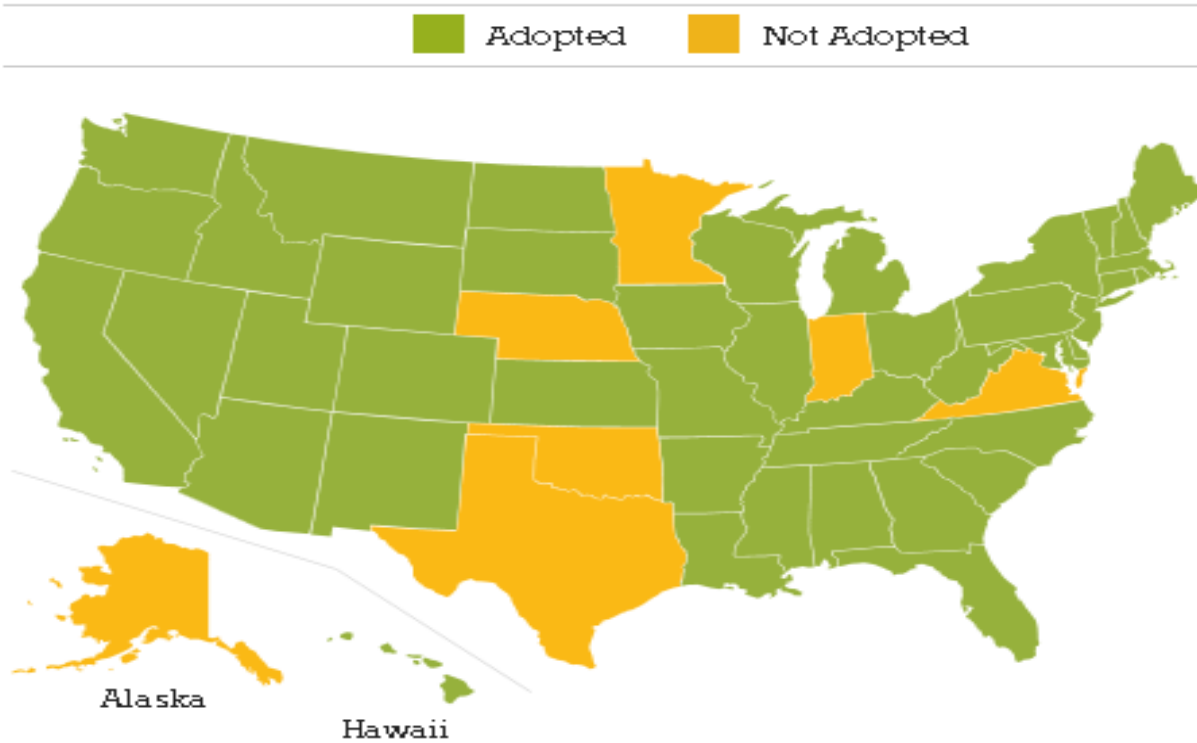
- Performance Based Assessment  
March 2 through March 27
- End of Year Assessment  
April 20 through May 15

# A Strong Foundation: The Common Core State Standards



- Nearly every state in the nation is working individually and collectively to improve its academic standards and assessments to ensure students graduate with the knowledge and skills most demanded by college and careers
- The Common Core State Standards in English language arts/literacy and mathematics were created by educators around the nation

# Common Core State Standards



 District of Columbia	 Puerto Rico	 Guam
 American Samoan Islands	 US Virgin Islands	 Northern Mariana Islands

\*Minnesota adopted the CCSS in ELA/literacy only

# What's Next?

## Common Assessments



- **Common Core State Standards** are critical, but it is just the first step
- **Common assessments** aligned to the Common Core will help ensure the new standards truly reach every classroom

# What Is PARCC?



## The Partnership for Assessment of Readiness for College and Careers:

- Made up of **19 states**
- Developing common, high-quality **math** and **English language arts (ELA) tests for grades 3–11**
  - Computer-based and linked to what students need to know for college and careers
  - For use starting in the 2014–15 school year



# PARCC Priorities



1. Determine whether students are **college and career ready or on track**
2. Connect to the **Common Core State Standards**
3. Measure the **full range of student performance**, including that of high- and low-achieving students
4. Provide educators **data throughout the year** to inform instruction
5. Create innovative **21st century, technology-based assessments**
6. Be **affordable** and **sustainable**

# How Will PARCC Be Different?



**Students:** Will know if they are **on track** to graduate ready for college/careers

**Teachers:** Will have access to **timely data** to guide learning and instruction

**Parents:** Will have **clear and timely information** about student progress

**States:** Will have **valid results** that are comparable across borders



# Higher Expectations



## ELA/Literacy

Read sufficiently complex texts independently

Write effectively to sources

Build and present knowledge through research

## Math

Solve problems: content and mathematical practice

Reason mathematically

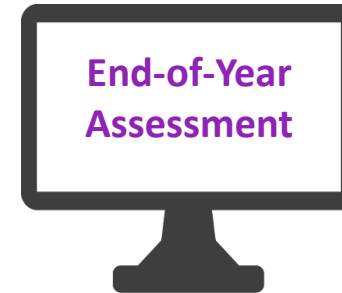
Model real-world problems

Have fluency with mathematics

# Two Required Assessments Yield Overall Score



- After 75 percent of the school year
- Extended tasks, applications of concepts and skills
  - **ELA/literacy:** Writing effectively when analyzing text, research simulation
  - **Math:** Solving multistep problems requiring abstract reasoning, precision, perseverance and strategic use of tools



- After 90 percent of the school year
- Innovative, short-answer items
  - **ELA/literacy:** Reading comprehension
  - **Math:** Short items that address both concepts and skills

# How long is the test?



## o ELA Grades 6-8

	PBA Unit 1	PBA Unit 2	PBA Unit 3	EOY Unit 1	EOY Unit 2
Unit Time	75	90	60	60	60
Est Time on Task	50	60	40	40	40

## Mathematics Grades 6-8

	PBA Unit 1	PBA Unit 2	PBA Unit 3	EOY Unit 1	EOY Unit 2
Unit Time	80 (90)	70 (75)	-	80	75
Est Time on Task	55 (60)	50	-	60	50

\* Algebra I Times noted in parentheses ( )

# How is the test scored?



- Results from the Performance Based Assessment (PBA) and End-of-year Assessment (EOY) will be combined to get a final score
- The score will be classified into one of five levels:
  - Level 5 (demonstrating distinguished command)
  - Level 4
  - Level 3
  - Level 2
  - Level 1 (demonstrating minimal command)
- Results should be received by the end of the school year (September for the first year)

# ELA Test Sections



- Research Simulation Task
- Narrative Task
- Literary Analysis Task

# Research Simulation Task



- Students will analyze an informational topic presented through several articles or multimedia stimuli, the first text being an anchor text that introduces the topic.
- Students will engage with the texts by answering a series of questions and synthesizing information from multiple sources in order to write two analytic essays.

# Narrative Task



- The Narrative Task broadens the way in which students may use this type of writing. Narrative writing can be used to convey experiences or events, real or imaginary.
- In this task, students may be asked to write a story, detail a scientific process, write a historical account of important figures, or to describe an account of events, scenes or objects, for example.

# Literary Analysis Task



- Students will read complex text closely, a skill that research reveals as the most significant factor differentiating college-ready from non-college-ready readers.
- Students will carefully consider literature worthy of close study and compose an analytic essay.



# ELA - Question Types



- Evidence Based Selected Response
- Technology Enhanced Constructed Response
- Prose Constructed Response

# ELA - Question Types



**Evidence-Based Selected Response (EBSR)—**  
Combines a traditional selected-response question with a second selected-response question that asks students to show evidence from the text that supports the answer they provided to the first question.

# Evidence-Based Selected Response

## #1 Part A



What does the word **regal** mean as it is used in the passage?

- a) generous
- b) threatening
- c) kingly\*
- d) uninterested

# Evidence-Based Selected Response

## #1 Part B



Which of the phrases from the passage best helps the reader understand the meaning of **regal**?

- a) “wagging their tails as they awoke”
- b) “the wolves, who were shy”
- c) “their sounds and movements expressed goodwill”
- d) “with his head high and his chest out”\*

# Evidence-Based Selected Response

## #2 Part A



Which statement correctly shows a difference between the beginnings and endings of the excerpts from *Brian's Winter* and *Call of the Wild*?

- A. *Call of the Wild* begins with a former conflict between characters, and *Brian's Winter* ends with a current conflict between characters.
- B. *Brian's Winter* begins by revealing a character's faulty reasoning, and *Call of the Wild* ends with a character's faulty reasoning.
- C. *Call of the Wild* begins with a crisis to be resolved, and *Brian's Winter* ends with a crisis that needs to be resolved.\*
- D. *Brian's Winter* begins with the thoughts and actions of a character seeking shelter, and *Call of the Wild* ends with the thoughts and actions of a character seeking shelter.

# Evidence-Based Selected Response

## #2 Part B



Select **one** detail from the list below from *Brian's Winter* and **one** detail from the list below from *Call of the Wild* that **best** support the answer in Part A.

- A. "He had seen them several times while picking berries, raking the bushes with their teeth to pull the fruit off..." (*Brian's Winter* paragraph 2)
- B. "Other than some minor scratches where the bear's claws had slightly scraped him—it was more a boxing action than a clawing one—Brian was in one piece." (*Brian's Winter* paragraph 16)
- C. "Everything in nature means something and he had missed the warnings that summer was ending, had in many ways already ended, and what was coming would be the most dangerous thing he had faced since the plane crash." (*Brian's Winter* paragraph 21)\*
- D. "The tent, illumined by a candle, glowed warmly in the midst of the white plain..." (*Call of the Wild* paragraph 1)
- E. "Miserable and disconsolate, he wandered about among the many tents, only to find that one place was as cold as another. (*Call of the Wild* paragraph 1)\*
- F. "The day had been long and arduous, and he slept soundly and comfortably, though he growled and barked and wrestled with bad dreams." (*Call of the Wild* paragraph 3)

# ELA - Question Types



## **Technology-Enhanced Constructed Response (TECR)—**

Uses technology to capture student comprehension of texts in authentic ways that have been difficult to score by machine for large scale assessments (e.g., drag and drop, cut and paste, shade text, move items to show relationships).

# Technology-Enhanced Constructed Response



According to the article “The Biography of Amelia Earhart,” which events had the most significant impact on Earhart’s life? From the list, create a summary by dragging the **four** most significant events and dropping them in chronological order into the table.

- |   |  |
|---|--|
| 1 | Earhart becomes the first woman to fly across the Atlantic Ocean by herself. |
| 2 | Earhart attends a finishing school in Philadelphia.                          |
| 3 | Earhart purchases her first plane.   |
| 4 | Earhart works as a nurse’s aide in Canada.                                   |
| 5 | Earhart attends an air show, where a stunt pilot flies close to her.         |
| 6 | Earhart sets off on a flight around the world.                               |
| 7 | Earhart places third at the Cleveland Women’s Air Derby.                     |

Event 1	
Event 2	
Event 3	
Event 4	

Correct Response: 5, 3, 1, 6



# ELA - Question Types



## **Prose Constructed Responses (PCR)—**

Elicits evidence that students have understood a text or texts they have read and can communicate that understanding well both in terms of written expression and knowledge of language and conventions. There are three of these items of varying types on each annual performance-based assessment; the Literary Analysis Task, the Research Simulation Task, and the Narrative Task.

# Research Simulation Task



You have read a website entry and an article and watched a video describing Amelia Earhart. All three include information that supports the claim that Earhart was a brave, courageous person. The three titles are:

“The Biography of Amelia Earhart”

“Earhart’s Final Resting Place Believed Found”

“Amelia Earhart’s Life and Disappearance” (video)

Consider the argument each author uses to demonstrate Earhart’s bravery.

Write an essay that analyzes the strength of the arguments related to Earhart’s bravery in at least two of the three supporting materials. Remember to use textual evidence to support your ideas.

# Narrative Task



In the passage, the author developed a strong character named Miyax. Think about Miyax and the details the author used to create that character. The passage ends with Miyax waiting for the black wolf to look at her.

Write an original story to continue where the passage ended. In your story, be sure to use what you have learned about the character Miyax as you tell what happens to her next.

# Literary Analysis Task



You have read excerpts from two novels focused on survival in the wilderness.

These excerpts are from:

- *Brian's Winter* by Gary Paulsen
- *Call of the Wild* by Jack London

Consider how the main character in each excerpt reacts to the incidences that occur, and write an essay in which you analyze how each character's thoughts and actions reveal aspects of his personality.

You do not need to compare and contrast the characters from the two texts. You may consider each one separately. Be sure to include evidence from each excerpt to support your analysis and understanding.

# ELA Rubric



**GRADES 6-11**  
**CONDENSED SCORING RUBRIC FOR PROSE CONSTRUCTED RESPONSE ITEMS**  
**(Revised July 29, 2014)\***

**Research Simulation Task and Literary Analysis Task**

<b>Construct Measured</b>	<b>Score Point 4</b>	<b>Score Point 3</b>	<b>Score Point 2</b>	<b>Score Point 1</b>	<b>Score Point 0</b>
<b>Reading Comprehension of Key Ideas and Details</b>	The student response demonstrates <b>full comprehension</b> of ideas stated explicitly and inferentially by providing an <b>accurate</b> analysis and supporting the analysis with <b>effective and convincing</b> textual evidence.	The student response demonstrates <b>comprehension</b> of ideas stated explicitly and/or inferentially by providing a <b>mostly accurate</b> analysis, and supporting the analysis with <b>adequate</b> textual evidence.	The student response demonstrates <b>basic comprehension</b> of ideas stated explicitly and/or inferentially by providing a <b>generally accurate</b> analysis and supporting the analysis with <b>basic</b> textual evidence.	The student response demonstrates <b>limited comprehension</b> of ideas stated explicitly and/or inferentially by providing a <b>minimally accurate</b> analysis and supporting the analysis with <b>limited</b> textual evidence.	The student response demonstrates <b>no comprehension</b> of ideas by providing inaccurate or no analysis and <b>little to no</b> textual evidence.

# Types of Math Problems



Task Type	Description of Task Type
<b>I. Tasks assessing concepts, skills and procedures</b>	<ul style="list-style-type: none"><li>• Balance of conceptual understanding, fluency, and application</li><li>• Can involve any or all mathematical practice standards</li><li>• Machine-scorable including innovative, computer-based formats</li><li>• Will appear on the End of Year and Performance Based Assessment components</li></ul>
<b>II. Tasks assessing expressing mathematical reasoning</b>	<ul style="list-style-type: none"><li>• Each task calls for written arguments / justifications, critique of reasoning, or precision in mathematical statements (MP3, 6).</li><li>• Can involve other mathematical practice standards</li><li>• May include a mix of machine scored and hand scored responses</li><li>• Included on the Performance Based Assessment component</li></ul>
<b>III. Tasks assessing modeling / applications</b>	<ul style="list-style-type: none"><li>• Each task calls for modeling/application in a real-world context or scenario (MP.4)</li><li>• Can involve other mathematical practice standards</li><li>• May include a mix of machine scored and hand scored responses</li><li>• Included on the Performance Based Assessment component</li></ul>

# How Many Math Questions of each Type?



## Performance-Based Assessment (PBA)

Question Type	Grade 6	Grade 7	Grade 8	Algebra I
Type I (1 point)	8	8	10	10
Type I (2 points)	2	2	1	-
Type II (3 points)	2	2	2	2
Type II (4 points)	2	2	2	2
Type III (3 points)	2	2	2	2
Type III (6 points)	1	1	1	2
Total	17	17	18	18

# How Many Math Questions of each Type?



## End-of-Year Assessment (EOY)

Question Type	Grade 6	Grade 7	Grade 8	Algebra I
Type I (1 point)	26	24	26	21
Type I (2 points)	7	8	5	11
Type I (4 points)	1	1	2	3
Total	34	33	33	35



# Grade 8 Type I Task



A right circular cone is shown in the figure. Point  $A$  is the vertex of the cone and point  $B$  lies on the circumference of the base of the cone.



The cone has a height of 24 units and a diameter of 20 units. What is the distance from point  $A$  to point  $B$ ?

units

# Grade 7 Type II Task



## Part A

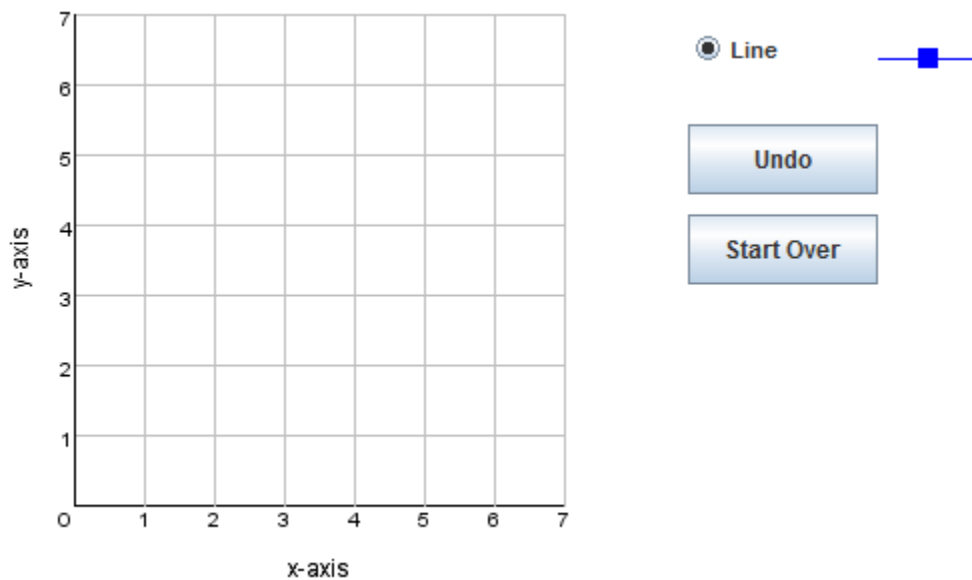
Each row of the table identifies a line containing a pair of points. Indicate whether each line represents a proportional relationship between  $x$  and  $y$ .

You may use the graphing tool by selecting two points. The line containing the two points will be automatically drawn. You can reset the tool by clicking "Start Over".

Be sure to indicate whether each line represents a proportional relationship or not by selecting the appropriate box in the table.

Line	Proportional Relationship	Not a Proportional Relationship
Line 1 containing (1, 3) and (2, 3)	<input type="checkbox"/>	<input type="checkbox"/>
Line 2 containing (1, 2) and (2, 4)	<input type="checkbox"/>	<input type="checkbox"/>
Line 3 containing (3, 1) and (6, 2)	<input type="checkbox"/>	<input type="checkbox"/>
Line 4 containing (0, 2) and (5, 4)	<input type="checkbox"/>	<input type="checkbox"/>
Line 5 containing (4, 4) and (5, 5)	<input type="checkbox"/>	<input type="checkbox"/>

# Grade 7 Type II Task (cont'd)



## Part B

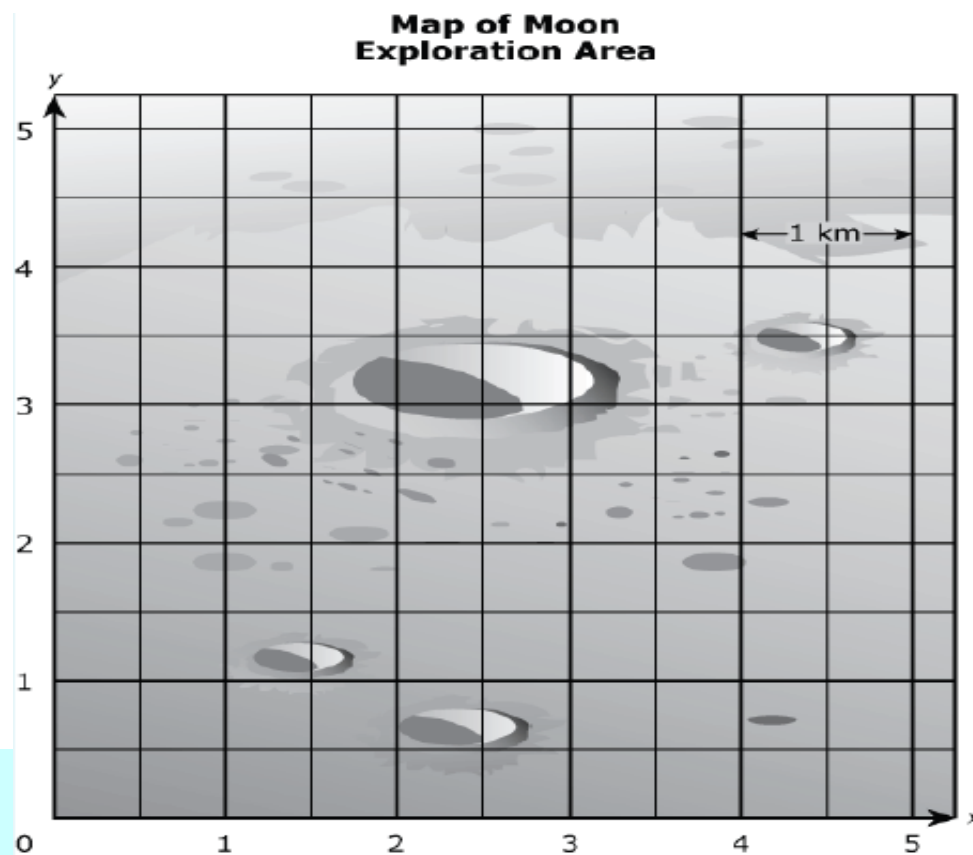
For the lines in Part A that do **not** represent a proportional relationship, explain why they do not.

For each line in Part A that does **not** represent a proportional relationship, describe how you would change the coordinates of one of the two given points on the line to create a proportional relationship.

# Grade 6 Type III Task



Scientists are sending a rover to the moon. Their plan is to study a rectangular area of the moon using the map shown. On the grid, 1 unit represents 1 kilometer (km).



Part A

The rover will land at  $(3.5, 1)$ , explore up to  $(3.5, 4)$ , and then over to  $(2, 4)$ .

Plot these three points on the map.

# Grade 6 Type III Task (cont'd)



Part B

What are the coordinates of the fourth vertex of the rectangle that the scientists plan to explore?

(  ,  )

Part C

What is the horizontal length of the rectangle?  kilometers

What is the vertical length of the rectangle?  kilometers

Part D

Find the area of the moon exploration area in square **meters**. Show your work.

# Grade 6 Reference Sheet



## Grade 6

1 inch = 2.54 centimeters

1 meter = 39.37 inches

1 mile = 5,280 feet

1 mile = 1,760 yards

1 mile = 1.609 kilometers

1 kilometer = 0.62 mile

1 pound = 16 ounces

1 pound = 0.454 kilograms

1 kilogram = 2.2 pounds

1 ton = 2,000 pounds

1 cup = 8 fluid ounces

1 pint = 2 cups

1 quart = 2 pints

1 gallon = 4 quarts

1 gallon = 3.785 liters

1 liter = 0.264 gallons

1 liter = 1000 cubic centimeters

Triangle	$A = \frac{1}{2}bh$
Rectangular Prism	$V = Bh$ or $V = lwh$

# Grade 7 Reference Sheet



## Grade 7

1 inch = 2.54 centimeters

1 meter = 39.37 inches

1 mile = 5,280 feet

1 mile = 1,760 yards

1 mile = 1.609 kilometers

1 kilometer = 0.62 mile

1 pound = 16 ounces

1 pound = 0.454 kilograms

1 kilogram = 2.2 pounds

1 ton = 2,000 pounds

1 cup = 8 fluid ounces

1 pint = 2 cups

1 quart = 2 pints

1 gallon = 4 quarts

1 gallon = 3.785 liters

1 liter = 0.264 gallons

1 liter = 1000 cubic centimeters

Triangle	$A = \frac{1}{2}bh$
Parallelogram	$A = bh$
Circle	$A = \pi r^2$
Circle	$C = \pi d$ or $C = 2\pi r$
General Prism	$V = Bh$

# Grade 8 Reference Sheet



## Grade 8

1 inch = 2.54 centimeters  
1 meter = 39.37 inches  
1 mile = 5,280 feet  
1 mile = 1,760 yards  
1 mile = 1.609 kilometers

1 kilometer = 0.62 mile  
1 pound = 16 ounces  
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1 gallon = 3.785 liters  
1 liter = 0.264 gallons  
1 liter = 1000 cubic centimeters

Triangle	$A = \frac{1}{2}bh$
Parallelogram	$A = bh$
Circle	$A = \pi r^2$
Circle	$C = \pi d$ or $C = 2\pi r$
General Prisms	$V = Bh$
Cylinder	$V = \pi r^2 h$
Sphere	$V = \frac{4}{3}\pi r^3$
Cone	$V = \frac{1}{3}\pi r^2 h$
Pythagorean Theorem	$a^2 + b^2 = c^2$



# Algebra I Reference Sheet



## High School Assessment Reference Sheet

1 inch = 2.54 centimeters  
 1 meter = 39.37 inches  
 1 mile = 5,280 feet  
 1 mile = 1,760 yards  
 1 mile = 1.609 kilometers

1 kilometer = 0.62 mile  
 1 pound = 16 ounces  
 1 pound = 0.454 kilograms  
 1 kilogram = 2.2 pounds  
 1 ton = 2,000 pounds

1 cup = 8 fluid ounces  
 1 pint = 2 cups  
 1 quart = 2 pints  
 1 gallon = 4 quarts  
 1 gallon = 3.785 liters  
 1 liter = 0.264 gallons  
 1 liter = 1000 cubic centimeters

Triangle	$A = \frac{1}{2}bh$
Parallelogram	$A = bh$
Circle	$A = \pi r^2$
Circle	$C = \pi d$ or $C = 2\pi r$
General Prisms	$V = Bh$
Cylinder	$V = \pi r^2 h$
Sphere	$V = \frac{4}{3}\pi r^3$
Cone	$V = \frac{1}{3}\pi r^2 h$
Pyramid	$V = \frac{1}{3}Bh$

Pythagorean Theorem	$a^2 + b^2 = c^2$
Quadratic Formula	$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$
Arithmetic Sequence	$a_n = a_1 + (n - 1)d$
Geometric Sequence	$a_n = a_1 r^{n-1}$
Geometric Series	$S_n = \frac{a_1 - a_1 r^n}{1 - r}$ where $r \neq 1$
Radians	$1 \text{ radian} = \frac{180}{\pi} \text{ degrees}$
Degrees	$1 \text{ degree} = \frac{\pi}{180} \text{ radians}$
Exponential Growth/Decay	$A = A_0 e^{k(t-t_0)} + B_0$

# Calculator Policy



- Grades 3-5: No calculators allowed
- Grades 6-7: Four-function with square root and percentage functions
- Grade 8: Scientific calculators
- Algebra I, Geometry, Algebra II: Graphing calculators (with functionalities consistent with TI-84 or similar models)

**Will be available online during the assessment**

**Students can bring their own hand-held calculator if it meets the given criteria**

- PARCC Website
  - [www.PARCConline.org](http://www.PARCConline.org)
- Township of Union Public Schools Website
  - [www.twpunionschools.org](http://www.twpunionschools.org)
  - PARCC Resources available
    - PARCC Time Schedules
    - Sample PARCC Questions and Practice Tests
    - FAQs