







Parents' Information Page

Math is a cumulative discipline; each course builds upon previous concepts with more complexity, more integration, and more independent work. This Summer Math Packet was created to provide extra practice on needed skills to enhance your child's success in the coming school year.

Here are some ways you can support your child's efforts:

-  **Please review the Summer Math Packet with your child.**
-  **Help your child create a timeline for work completion. Your child should complete one unit before moving on to the next. These units do NOT include an entire year's curriculum. The objectives were carefully chosen to highlight key concepts in the 8th grade curriculum.**
-  **Provide a quiet, organized work space to help your child stay focused.**
-  **It's ok if you or other adults provide assistance.**
-  **Calculators should not be used unless otherwise indicated.**
-  **Try to make time to review your child's work at the end of each unit.
Answer sheets are included in this parent information packet.**

 **Remind your child to return their Summer Math Packet to their math teacher the first week of school.**

 **You can access your textbook online. See the Textbook Navigation Page for information.**

 **If you have any questions, you can reach me at Shirley.mcdonald@fcps.org**

Thank you for encouraging your child to work on math over the summer!

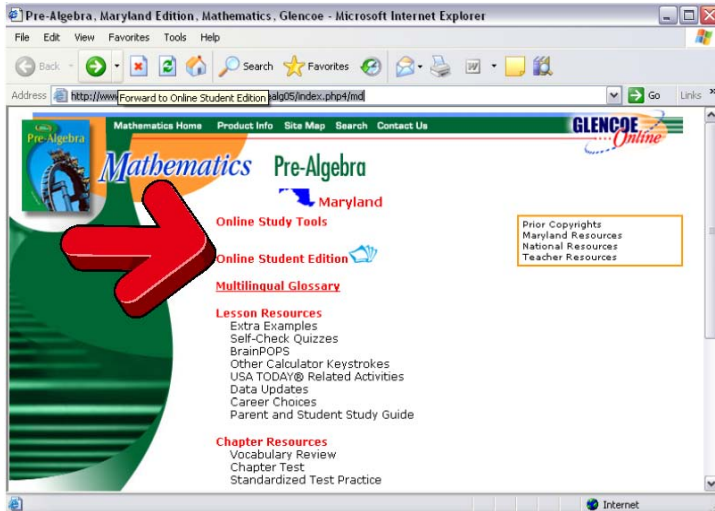
Chapter/Section in Text	FCPS Indicator Number	Content Standard/Indicators
	MA.800.10	KNOWLEDGE of ALGEBRA, PATTERNS and FUNCTIONS
1.5; 3.3;3.4	MA.800.10.70	Identify equivalent equations.
	MA.800.20	KNOWLEDGE of GEOMETRY
10.1	MA.800.20.05	Identify and describe relationships between angles formed when parallel lines are cut by a transversal.
9.5	MA.800.20.20	Use the Pythagorean Theorem.
9.4; 9.7	MA.800.20.25	Determine whether 3 given side lengths form a right triangle.
10.4	MA.800.20.30	Draw quadrilaterals given their whole number dimensions in in/cm of angle measurements.
	MA.800.30	KNOWLEDGE of MEASUREMENT
10.7	MA.800.30.05	Estimate and determine the circumference or area of a circle.
10.5	MA.800.30.10	Estimate and determine area of composite figures.
11.2	MA.800.30.15	Estimate and determine the volume of a cylinder.
6.3	MA.800.30.30	Use proportions, scale drawings (with scales as whole numbers), or rates to solve measurement problems.
	MA.800.40	KNOWLEDGE of STATISTICS
	MA.800.40.15	Interpret circle graphs.
1.6; 8.1	MA.800.40.05	Interpret tables.
	MA.800.50	KNOWLEDGE of PROBABILITY
12.9	MA.800.50.05	Describe the difference between independent and dependent events.
12.9	MA.800.50.15	Express the probability of an event as a fraction, a decimal or a percent.
12.9	MA.800.50.20	Determine the probability that a second event is dependent upon a first event of equally likely outcomes and express the probability as a fraction, decimal, or percent.
	MA.800.60	KNOWLEDGE of NUMBER RELATIONSHIPS and COMPUTATION
9.1	MA.800.60.35	Estimate the square roots of whole numbers.
6.2; 6.3; 6.5	MA.800.60.50	Solve problems using proportional reasoning.

Textbook Navigation Page

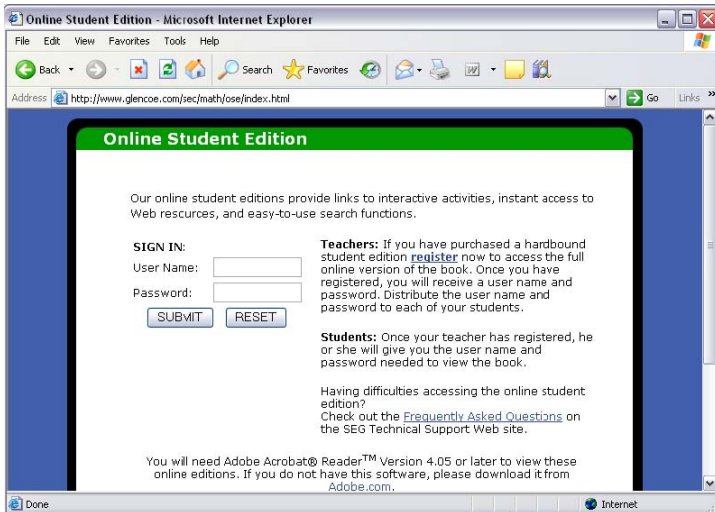
To get to the online version of the book:

1.) Go to

<http://www.glencoe.com/sec/math/prealg/prealg05/index.php4/m>
[d](http://www.glencoe.com/sec/math/prealg/prealg05/index.php4/m)



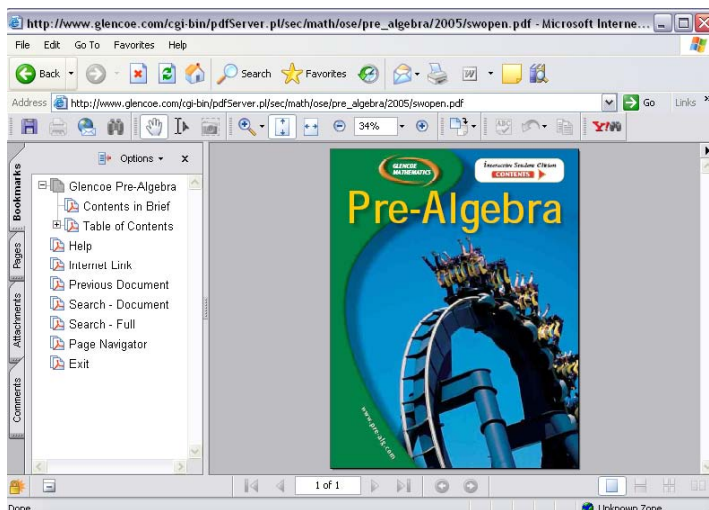
2.) Click Online Student Edition



3.) Enter the following information:

Username: PREALG05

Password: ph5Ves7a



4.) Click on Table of Contents – this will bring up each section of the book. Click on the Section,



followed by the chapter you want. Continue to use the Bookmark side bar to navigate through the book and its pages.

****Note: You can not print the book. It is copyrighted by the publisher. This is for viewing purposes only.**

ANSWERS – FOR PARENTS USE ONLY

Unit: Knowledge of Algebra, Patterns, and Functions

Page: 4

Objective: Identify Equivalent Equations

Textbook Section: 1-5, 3-3, 3-4

- 1.) $x = 3$
- 2.) $h = - 2$
- 3.) D ($30 = 3d + 6$)
- 4.) C ($8x + 12 = 12x + 10$)
- 5.) Yes they are equivalent
- 6.) D ($13x = 21$)

End of Unit

Unit: Knowledge of Geometry

Page: 5

Objective: Identify and describe relationships between angles formed when parallel lines are cut by a transversal.

Textbook Section: 10-1

1.) Corresponding

2.) 120° – Alternate Interior Angles

3.) 3 & 6 ; 4 & 5

4.) Alternate Exterior Angles

5.) D (103°) because Alt Interior Angles

6.) 58° because Vertical Angles

Page: 6

Objective: Use the Pythagorean Theorem

Textbook Section: 9-5

- 1.) $c = \sqrt{900} = 30$
- 2.) $c = \sqrt{625} = 25$
- 3.) $b = \sqrt{224} = 14.96 \quad 15 \approx$
- 4.) $a = \sqrt{336} = 18.3$
- 5.) c (44 ft)
- 6.) $c = \sqrt{225} = 15$

Page: 7

Objective: Determine whether 3 given side lengths form a right triangle

Textbook Section: 9-4, 9-7

- 1.) No, it is NOT a Right Triangle.
- 2.) Yes, it is a right triangle.
- 3.) No, it is NOT a right triangle.
- 4.) No, it is NOT a right triangle.
- 5.) Yes, it is a right triangle.
- 6.) Yes, it is a right triangle.

Page: 8

Objective: Draw quadrilaterals given their whole number dimensions in in/cm of angle measurements

Textbook Section: 10-4

- 1.) $x = 60^\circ$
- 2.) $x = 75^\circ$; $A \Rightarrow x = 75^\circ$; $B \Rightarrow 2x = 150^\circ$
- 3.) Sometimes, Always, Sometimes, Never, Always

$$4.) x = 25^\circ ; 2x = 50^\circ ; 3x = 75^\circ$$

$$5.) x = 60^\circ ; 2x = 120^\circ$$

$$6.) x = 15^\circ ; 2x = 30^\circ ; 8x = 120^\circ ; 10x = 150^\circ$$

End of Unit

Unit: Knowledge of Measurement

Page: 9

Objective: Estimate and determine the circumference or area of a circle

Textbook Section: 10-7

$$1.) A = 28.26 \text{ cm}^2$$

- 2.) $C = 21.98 \text{ m}$
- 3.) $A = 47.03 \text{ mi}^2$
- 4.) $C = 49.42 \text{ mi}$
- 5.) $A = 50.24 \text{ in}^2$
- 6.) $C = 28.26 \text{ in}$

Page: 10

Objective: Estimate and determine area of composite figures

Textbook Section: 10-5

- 1.) $A (54 \text{ ft}^2)$
- 2.) 36 m^2
- 3.) 26 ft^2
- 4.) 180 m^2
- 5.) 138 m^2
- 6.) $A (250 \text{ ft}^2)$

Page: 11

Objective: Estimate and determine the volume of a cylinder

Textbook Section: 11-2

- 1.) $A (384 \text{ yd}^3)$
- 2.) 863.5 m^3
- 3.) 791.28 mm^3
- 4.) 2289.06 cm^3
- 5.) 23550 m^3
- 6.) 113.04 in^3

Page: 12

Objective: Use **proportions**, **scale drawings**, or **rates** to solve measurement problems - A

Textbook Section: 6-3

- 1.) $n = 8$
- 2.) $n = 25.5$ miles
- 3.) $n = 40$ feet
- 4.) $n = 6$ inches
- 5.) The flagpole has a shadow of 15 ft.
- 6.) The road is 105 meters long.

Page: 13

Objective: Use **proportions**, **scale drawings**, or **rates** to solve measurement problems - B

Textbook Section: 6-3

- 1.) $n = 25$ km
- 2.) \$1.86 per kg
- 3.) 327 calories per serving
- 4.) 32 (\$0.32) cents per minute
- 5.) $n = \$31$ per day
- 6.) $n = 10$ laps in 30 minutes

End of Unit

Where Remember:

d = diameter

r = radius

$$r^2 = r \cdot r$$

$$\pi = 3.14$$

$$r = \frac{1}{2} d$$

$$d = 2r$$

Unit: Knowledge of Statistics

Page: 14

Objective: Interpret circle graphs

Textbook Section:

- 1.) 65%
- 2.) Snacks, Video, & Bus Fare
- 3.) \$20
- 4.) \$81.25
- 5.) \$14.25
- 6.) \$47.25

Page: 15

Objective: Interpret tables

Textbook Section: 1-6, 8-1

- 1.) 3,053 acres
- 2.) Tuckahoe (3,498) & Assateague (756); 4,254 total acres
- 3.) Blue
- 4.) \$230
- 5.) $\frac{1}{5}$
- 6.) $\frac{55}{230} = \frac{11}{46} = 23.9\%$

End of Unit

Unit: Knowledge of Probability

Page: 16

Objective: Express the probability of an event as a fraction, a decimal, or a percent

Textbook Section: 12-9

1.) $\frac{1}{3} = 0.\bar{3} = 33\frac{1}{3}\%$

2.) $\frac{0}{45} = 0.0 = 0\%$

3.) $\frac{41}{45} = 0.9\bar{1} = 91.\bar{1}\%$

4.) $\frac{7}{9} = 0.\bar{7} = 77.8\%$

5.) $\frac{45}{45} = 1.0 = 100\%$

6.) $\frac{5}{9} = 0.\bar{5} = 55.6\%$

Page: 17

Objective: Describe the difference between independent and dependent events

Textbook Section: 12-9

1.) **INDEPENDENT:** when an outcome of 2 or more events do NOT affect each other. Example: spinning a spinner, then drawing a marble

DEPENDENT: when the outcome of the 1st event affects the 2nd event.

Example: picking a card, NOT replacing it, picking a 2nd card

2.) A) DEPENDENT

B) INDEPENDENT

C) INDEPENDENT

3.) $\frac{5}{12}$

4.) $\frac{1}{10} = 10\%$

5.) **DEPENDENT**

6.) $\frac{5}{18}$

Page: 18

Objective: Determine the probability that a second event is dependent upon a first event of equally likely outcomes and express the probability as a fraction, decimal, or percent

Textbook Section: 12-9

1.) $\frac{1}{26}$

2.) **10.5%**

3.) **0.06**

4.) $\frac{13}{204}$

5.) **0.125**

6.) **10.0%**

End of Unit

Unit: Knowledge of Number Relationships and Computation

Page: 19

Objective: Estimate the square roots of whole numbers

Textbook Section: 9-1

- 1.) -10
- 2.) $6.855 \approx 6.9$
- 3.) $9 \pm$
- 4.) $17.606 \approx 17.6$
- 5.) 11
- 6.) $8.717 \approx 8.7$

Page: 20

Objective: Solve problems using proportional reasoning

Textbook Section: 6-2, 6-3, 6-5

- 1.) $n = 25\%$
- 2.) 375
- 3.) 10
- 4.) 100 students
- 5.) 10 blue
- 6.) 40%

End of Unit