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USA TEST PREP MATH I EOCT PREPARATION ASSIGNMENTS

Directions: Math I (EOCT) will be given on May 16, 2012 and will count for 20% of your semester grade. In order to prepare for this exam you are to complete the following assignments at home or in the Media Center. Each assignment must be completed no later than 4:00 PM on the due date listed below.

1st Time Login information for USA Test Prep at **www.usatestprep.com**:
Username: **woodlandhsga**   Student Password: **newton80**

1. Access USA Test Prep – Member Login information for USA Test Prep:
   www.usatestprep.com – If this is your first time logging in, use the information above to create a member login. If not, login using your personal username and password.
2. Click on 'Take a Benchmark Test.' It is highlighted in green on the first page.
3. Type in TEST CODE listed below
4. Choose your teacher & class period
5. Click on 'load test'
6. When you finish the test, click on 'Grade My Test Now.'
7. Retake missed questions
8. Write down your score
9. Practice as much as you want… the description on USATestPrep is given.

USA Test Prep – Topic / Benchmark Code	Due Date	Standards and USATestPrep Description		
Algebra: Explore Functions 25 problems (DAXEREMEHO)	**Tuesday, March 20**	Test:	GPS Mathematics 1	
		Domain:	Algebra - Explore Functions	
		Elements:	relate to a given context MM1A1e function notation MM1A1a recognize sequences MM1A1f function symmetry MM1A1h graph transformations MM1A1c f(x)=g(x) MM1A1i characteristics of a function MM1A1d graph basic functions MM1A1b explore rates of change MM1A1g	
Algebra: Simplify Expressions 20 problems (MUHUWOMUBE)	**Friday, March 23**	Test:	GPS Mathematics 1	
		Domain:	Algebra - Simplify Expressions	
		Elements:	expressions with square roots MM1A2a polynomials MM1A2c factoring MM1A2f rational expressions MM1A2e operations with square roots MM1A2b area and volume models MM1A2g Binomial Theorem MM1A2d	

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Algebra: Solve Equations 10 questions (PEZARERUTA)	**Tuesday, March 27**	Test: Domain: Elements:	GPS Mathematics 1 Algebra - Solve Equations solve quadratics MM1A3a simple rational equations MM1A3d solve quadratics various techniques MM1A3c radical equations MM1A3b
Data Analysis and Probability - Mean Deviation 5 questions (JAFAMONOTU)	**Tuesday, March 27**	Test: Domain: Element:	GPS Mathematics 1 Data Analysis and Probability - Mean Deviation mean absolute deviation MM1D4
Geometry: Understand Language of Geometry 10 questions (YULAZALUZO)	**Friday, March 30**	Test: Domain: Elements:	GPS Mathematics 1 Geometry - Understand Language Reasoning MM1G2a conditional statements MM1G2b
Geometry: Properties of Polygons 16 questions (PEJAZUCARE)	**Friday, March 30**	Test: Domain: Elements:	GPS Mathematics 1 Geometry - Properties of Polygons triangle inequalities MM1G3b special quadrilaterals MM1G3d concurrency in triangles MM1G3e triangle congruence MM1G3c angles in polygons MM1G3a
Data Analysis and Probability - Outcomes 10 questions (DAJOSOWUSE)	**Wednesday, April 11**	Test: Domain: Elements:	GPS Mathematics 1 Data Analysis and Probability - Outcomes permutations and combinations MM1D1b counting principles MM1D1a
Data Analysis and Probability – Probability 14 questions (PAHOYADUDA)	**Friday, April 13**	Test: Domain: Elements:	GPS Mathematics 1 Data Analysis and Probability - Probability conditional probability MM1D2c probability - dependent events MM1D2b expected value MM1D2d probability - mutually exclusive MM1D2a

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Data Analysis and Probability - Relate Samples 10 questions (GECAMODUGU)	**Wednesday, April 18**	Test:	GPS Mathematics 1
		Domain:	Data Analysis and Probability - Relate Samples
		Elements:	large samples MM1D3b random samples MM1D3c summary statistics MM1D3a
Geometry: Investigate Geometric Figures 10 questions (KUJUHEREYU)	**Friday, April 20**	Test:	GPS Mathematics 1
		Domain:	Geometry - Investigate Geometric Figures
		Elements:	distance - point to line MM1G1b Pythagorean theorem MM1G1d coordinate geometry MM1G1e distance formula MM1G1a midpoint formula MM1G1c

***Domain:* - Algebra - Explore Functions**

`0` ▼	**(MM1A1.A) function notation** Represent functions using function notation.
`0` ▼	**(MM1A1.B) graph basic functions** Graph the basic functions $f(x) = x^n$, where n = 1 to 3, $f(x) = x$, $f(x) = |x|$, and $f(x) = x$
`0` ▼	**(MM1A1.C) graph transformations** Graph transformations of basic functions including vertical shifts, stretches, and shrinks, as well as reflections across the x- and y-axes.
`0` ▼	**(MM1A1.D) characteristics of a function** Investigate and explain the characteristics of a function: domain, range, zeros, intercepts, intervals of increase and decrease, maximum and minimum values, and end behavior.
`0` ▼	**(MM1A1.E) relate to a given context** Relate to a given context the characteristics of a function, and use graphs and tables to investigate its behavior.
`0` ▼	**(MM1A1.F) recognize sequences** Recognize sequences as functions with domains that are whole numbers.
`0` ▼	**(MM1A1.G) explore rates of change** Explore rates of change, comparing constant rates of change (i.e., slope)versus variable rates of change. Compare rates of change of linear, quadratic, square root, and other function families.
`0` ▼	**(MM1A1.H) function symmetry** Determine graphically and algebraically whether a function has symmetry and whether it is even, odd, or neither.
`0` ▼	**(MM1A1.I) f(x)=g(x)** Understand that any equation in x can be interpreted as the equation $f(x) = g(x)$, and interpret the solutions of the equation as the x-value(s) of the intersection point(s) of the graphs of $y = f(x)$ and $y = g(x)$.

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Domain - **Algebra - Simplify Expressions**

| 0 ▾ | **(MM1A2.A) expressions with square roots**
Simplify algebraic and numeric expressions involving square root. |

| 0 ▾ | **(MM1A2.B) operations with square roots**
Perform operations with square roots. |

| 0 ▾ | **(MM1A2.C) polynomials**
Add, subtract, multiply, and divide polynomials. |

| 0 ▾ | **(MM1A2.D) Binomial Theorem**
Expand binomials using the Binomial Theorem. |

| 0 ▾ | **(MM1A2.E) rational expressions**
Add, subtract, multiply, and divide rational expressions. |

| 0 ▾ | **(MM1A2.F) factoring**
Factor expressions by greatest common factor, grouping, trial and error, and special products limited to the formulas below. |

| 0 ▾ | **(MM1A2.G) area and volume models**
Use area and volume models for polynomial arithmetic. |

Domain - **Algebra - Solve Equations**

| 0 ▾ | **(MM1A3.A) solve quadratics**
Solve quadratic equations in the form $ax^2 + bx + c = 0$, where $a = 1$, by using factorization and finding square roots where applicable. |

| 0 ▾ | **(MM1A3.B) radical equations**
Solve equations involving radicals such as $x + b = c$, using algebraic techniques. |

| 0 ▾ | **(MM1A3.C) solve quadratics with various techniques**
Use a variety of techniques, including technology, tables, and graphs to solve equations resulting from the investigation of $x^2 + bx + c = 0$. |

| ▾ | **(MM1A3.D) simple rational equations**
Solve simple rational equations that result in linear equations or quadratic equations with leading coefficient of 1. |

Domain - **Geometry - Investigate Geometric Figures**

| 0 ▾ | **(MM1G1.A) distance formula**
Determine the distance between two points. |

| 0 ▾ | **(MM1G1.B) distance - point to line**
Determine the distance between a point and a line. |

| 0 ▾ | **(MM1G1.C) midpoint formula**
Determine the midpoint of a segment. |

| 0 ▾ | **(MM1G1.D) Pythagorean theorem**
Understand the distance formula as an application of the Pythagorean theorem. |

| 0 ▾ | **(MM1G1.E) coordinate geometry**
Use the coordinate plane to investigate properties of and verify conjecture related to triangles and quadrilaterals. |

Domain - **Geometry - Understand Language**

| 0 ▾ | **(MM1G2.A) reasoning**
Use conjecture, inductive reasoning, deductive reasoning, counterexamples, and indirect proof as appropriate. |

0 ▾	(MM1G2.B) conditional statements Understand and use the relationships among a statement and its converse, inverse, and contrapositive.

Domain - **Geometry - Properties of Polygons**

0 ▾	(MM1G3.A) angles in polygons Determine the sum of interior and exterior angles in a polygon.
0 ▾	(MM1G3.B) triangle inequalities Understand and use the triangle inequality, the side-angle inequality, and the exterior-angle inequality.
0 ▾	(MM1G3.C) triangle congruence Understand and use congruence postulates and theorems for triangles (SSS, SAS, ASA, AAS, HL).
0 ▾	(MM1G3.D) special quadrilaterals Understand, use, and prove properties of and relationships among special quadrilaterals: parallelogram, rectangle, rhombus, square, trapezoid, and kite.
0 ▾	(MM1G3.E) concurrency in triangles Find and use points of concurrency in triangles: incenter, orthocenter, circumcenter, and centroid.

Domain - **Data Analysis and Probability - Outcomes**

0 ▾	(MM1D1.A) counting principles Apply the addition and multiplication principles of counting.
0 ▾	(MM1D1.B) permutations and combinations Calculate and use simple permutations and combinations.

Domain - **Data Analysis and Probability - Probability**

0 ▾	(MM1D2.A) probability - mutually exclusive Find the probabilities of mutually exclusive events.
0 ▾	(MM1D2.B) probability - dependent events Find the probabilities of dependent events.
0 ▾	(MM1D2.C) conditional probability Calculate conditional probabilities.
0 ▾	(MM1D2.D) expected value Use expected value to predict outcomes.

Domain - **Data Analysis and Probability - Relate Samples**

0 ▾	(MM1D3.A) summary statistics Compare summary statistics (mean, median, quartiles, and interquartile range) from one sample data distribution to another sample data distribution in describing center and variability of the data distributions.
0 ▾	(MM1D3.B) large samples Compare the averages of the summary statistics from a large number of samples to the corresponding population parameters.
0 ▾	(MM1D3.C) random samples Understand that a random sample is used to improve the chance of selecting a representative sample.

- **Domain** **Data Analysis and Probability - Mean Deviation**

0 ▾	(MM1D4) mean absolute deviation Determine the mean absolute deviation (the average of the absolute values of the deviations).

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