

If you ACE Heart of Algebra, the other topics will be smooth sailing!



Tuesday

Topic	%
Heart of Algebra - Analyzing and fluently solving equations and systems of equations - Creating expressions, equations, and inequalities to represent relationships - Rearranging and interpreting formulas	35%
Problem Solving and Data Analysis - Creating and analyzing relationships using ratios, proportions and percents - Describing relationships shown graphically - Summarizing qualitative and quantitative data	28%
Passport to Advanced Math - Rewriting expressions using their structure - Creating, analyzing, and fluently solving quadratic and higher-order equations - Manipulating polynomials purposefully to solve problems	27%
Additional Topics in Math - Making area and volume calculations in context - Investigating lines, angles, triangles, and circles using theorems - Working with trigonometric functions	10%

About the Math Test

Math topic	Main focus	Test questions	Percentage
Heart of Algebra	mastery of linear equations and systems	19 Questions	32.76%
Problem Solving and Data Analysis	being quantitatively literate	17 Questions	29.31%
Passport to Advanced Math	manipulation of complex equations	16 Questions	27.59%
Additional Topics	understanding of rarer math concepts	6 Questions	10.34%

1. If $2x + 8 = 16$, what is the value of $x+4$?

2. $3x + x + x + x - 3 - 2 = 7 + x + x$
in the equation above, what is the value of x ?

Find someone who solved one of these problems differently than you.

Wednesday	Thursday	Friday
1. If $3(c+d) = 5$, what is the value of $c + d$? a) $\frac{3}{5}$ b) $\frac{5}{3}$ c) 3 d) 5 2. $2(5x-20) - (15 + 8x) = 7$ What value of x satisfies the equation above?	1. $x - \frac{1}{2}a = 0$ If $x = 1$ in the equation above, what is the value of a? 2. For what value of n is $n - 1 + 1$ equal to zero? a) 0 b) 1 c) 2 d) There is no such value of n Defend one of your answers with someone who thought differently.	1. If $\frac{3}{4}m = \frac{5}{8}$, what is the value of m? A.) $\frac{5}{6}$ B.) $\frac{15}{32}$ C.) $\frac{6}{5}$ D.) $\frac{32}{15}$ 2. If $\frac{3}{5}w = \frac{4}{3}$, what is the value of w ? A) $\frac{9}{20}$ B) $\frac{4}{5}$ C) $\frac{5}{4}$ D) $\frac{20}{9}$