Quantitative Reasoning

CURRICULUM GUIDE

The following topics will be covered for the course, including the tentative days/meeting schedule.

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| QUARTER 1 | |
| PROBLEM SOLVING AND CRITICAL THINKING | |
| Topic/s | Dates (Tentative) |
| Inductive And Deductive Reasoning | August 5  August 8-9  August 10-11  August 12 |
| Estimation, Graphs, and Mathematical Models |
| Problem Solving |
| Unit Test |
| SET THEORY | |
| Basic Set Concepts | August 16-17  August 17  August 18-22  August23-24  August 25-26 |
| Subsets |
| Venn Diagram And Set Operations |
| Set Operations And Venn Diagrams With Three Sets |
| Survey Problem |
| Unit Test | August 29 |
| NUMBER THEORY AND THE REAL NUMBER SYSTEM | |
| Number Theory; Prime And Composite Numbers | Sept. 1-2  Sept 6-7  Sept 8-9  Sept 12  Sept 13-14  Sept 15-16  Sept 19-20 |
| The Integers; Order Of Operations |
| The Rational Numbers |
| The Irrational Numbers |
| Real Numbers & Their Properties |
| Exponents & Scientific Notation |
| Arithmetic & Geometric Sequences |
| Unit Test |  |
| ALGEBRA: EQUATIONS AND INEQUALITIES | |
| Algebraic Expressions And Formulas | Sept 21-22 |
| Linear Equations In One Variable | Sept 23 |
| Applications Of Linear Equations | Sept 26-27 |
| Linear Inequalities in One Variable | Sept 28 |
| Modeling With Proportions | Sept 29-30 |
| Modeling Using Variations (writing the formula for Direct/Inverse Variations) | Oct 3-4 |
| Quarter 1 Test | Oct 5-6 |
| QUARTER 2 | |
| ALGEBRA; GRAPHS; FUNCTIONS; LINEAR FUNCTIONS; AND LINEAR SYSTEMS | |
| Graphing And Functions  Linear Functions and Their Graphs | Oct 11-12 |
| The Point-Slope Form of The Equation of The Line; Scatter Plots And The Regression Lines | Oct 13-14 |
| System Of Linear Equations in Two Variables | Oct 17-19 |
| Linear Inequalities in Two Variables | Oct 20-21 |
| Unit Test | Oct 24-25 |
| POLYNOMIALS; QUADRATIC EQUATIONS; AND QUADRATIC FUNCTIONS | |
| Operations With Polynomials; Polynomial Functions | Oct 26-27 |
| Factoring Polynomials | Oct 28,31 |
| Solving Quadratic Equations By Factoring | Nov 1-2 |
| Solving Quadratic Equations By The Square Root Property And The Quadratic Formula | Nov 3-4 |
| Quadratic Functions And Their Graphs | Nov 7-8 |
| Unit Test | Nov 9-10 |
| MEASUREMENT & GEOMETRY | |
| Dimensional Analysis: Conversion  Measuring Length; The Metric System  Measuring Area and Volume  Measuring Weight and Temperature | Nov 14-15 |
| Points, Lines Planes, and Angles and their Relationships | Nov 16 |
| Relationships in Triangles | Nov 17 |
| Polygons, Perimeters, Tessellations | Nov 18 & 28 |
| Area And Circumference | Nov 29-30 |
| Volume | Dec 1-2 |
| Right Triangle Trigonometry | Dec. 5-6 |
| Distance And Midpoint Formulas; Circles | Dec 7-8 |
| Quarter 2 Test | Dec 9 &12 |
| Sem 1 Test | Dec 13-14 |
| QUARTER 3 | |
| PERSONAL FINANCE: TAXES AND INTEREST | |
| Precents; Sales Tax; Discounts | Jan 4-5 |
| Income Tax | Jan 6, 9 & 10 |
| Simple Interest | Jan 11 |
| Compound Interest | Jan 12-13 |
| PERSONAL FINANCE: SAVING; INVESTING; AND SPENDING | |
| Annuities; Methods Of Saving And Investments | January 17-18 |
| Cars | January 19-20 |
| The Cost Of Home Ownership | January 23-24 |
| Credit Cards | January 25 |
| Chapter 11- COUNTING METHODS AND PROBABILITY THEORY | |
| The Fundamental Counting Principle | January 26-27 |
| Permutations | January 30 |
| Combinations | January 31 |
| Fundamentals Of Probability | Feb 1 |
| Probability With The Fundamental Counting Principle, Permutations, And Combinations | Feb 1-2 |
| Events Involving NOT And OR; Odds | Feb 3 & 6 |
| Events Involving AND; Conditional Probability | Feb 7-8 |
| Unit Test | Feb 9-10 |
| STATISTICS | |
| Sampling, Frequency Distribution, And Graphs | Feb 13-14 |
| Measures Of Central Tendency | Feb 15-16 |
| Measures Of Dispersion | Feb 17 & 21 |
| The Normal Distribution | Feb 22-23 |
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| QUARTER 4 | |
| PBL Project (TBA) | |

Prepared by:

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