## TSIA2 Math Content Strands

| College Readiness Classification Content | \# of Questions | \% of Test |
| :---: | :---: | :---: |
| Quantitative Reasoning <br> - Compare magnitudes of rational and irrational numbers <br> - Solve problems with ratios, proportions, and percents <br> - Solve proportional relationship problems in context (e.g., linear relationships in financial literacy and numeracy) <br> - Identify, manipulate, and interpret linear equations, inequalities, and expressions | 6 | 30\% |
| Algebraic Reasoning <br> - Solve linear equations, inequalities, and systems of linear equations <br> - Evaluate linear functions <br> - Solve quadratic and exponential relationship problems in context (e.g., exponential decay/growth, compound interest, and depreciation) <br> - Identify and manipulate quadratic, polynomial, exponential, rational, and radical equations and expressions <br> - Solve equations and evaluate functions (e.g., quadratic, polynomial, exponential, rational, and radical) | 7 | 35\% |
| Geometry \& Spatial Reasoning <br> - Convert units within systems of measurement <br> - Find perimeter, area, surface area and volume using a variety of methods, including estimation <br> - Use transformations to investigate congruence, similarity, and symmetry <br> - Apply right triangle relationships and basic trigonometry <br> - Make connections between geometry and algebraic equations | 3 | 15\% |
| Probability \& Statistics <br> - Compute and interpret probability <br> - Compute and describe measures of center and spread of data <br> - Classify data and construct appropriate representations of data <br> - Analyze, interpret, and draw conclusions from data | 4 | 20\% |


| Additional Content added to Diagnostic Test | \# of <br> Questions | \% of Test |
| :--- | :---: | :---: |
| Quantitative Reasoning <br> - Perform basic math operations with whole numbers and integers, decimals, and fractions <br> - Round numbers to a given decimal place* <br> Compare numbers in a variety of forms, including decimals, fractions, and percents | $60 \%$ |  |
| Algebra | 7 |  |
| Geometry \& Measurement <br> - Identify common units of measurement <br> Identify and define types of angles | 3 | $15 \%$ |
| Data Analysis, Statistics, \& Probability <br> - Sort and count data <br> - Construct simple graphs and tables | 4 | $20 \%$ |

## Source

TSIA2 Mathematics Specifications V1.4 https://reportcenter.highered.texas.gov/training-materials/tsia2-math-test-specifications-v1-4/

## Test Taking Strategies

- Key Features
- Answer choices are carefully constructed (usually correspond to errors in thinking, not errors in arithmetic)
- Answer choices, for the most part, are arranged in order (smallest to largest or vice versa)
- You cannot return to previous questions once you submit your answer
- Test Day Strategies
- Read the question carefully
- Pay attention to units (you may have to convert)
- Eliminate answer choices that cannot be correct
- Use the answer choices to check your math
of Central Texas

