**Foundations of Math 11 Learning Goals**

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



**Big Ideas:**

1. Similar shapes and objects have proportional relationships that can be described, measured, and compared
2. Optimization informs the decision-making process in situations involving extreme values
3. Logical reasoning helps us discover and describe mathematical truths
4. Statistical analysis allows us to notice, wonder about, and answer questions about variation

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| --- | --- | --- | --- | --- |
| **Learning Goals** | **Content (Tests)** |  | **Level** | **What Does This Mean?** |
| 1. I can use inductive and deductive reasoning, conjectures, and counterexamples
 |  |  | **1** | **I have not shown enough understanding to pass** |
| 1. I can determine, explain, verify, identify and correct a strategy to solve a puzzle.
 |  |  | **2** | **I have shown 50% understanding** |
| 1. I can determine if an argument is valid and identify errors in a given proof
 |  |  | **3** | **I am starting to understand, but have gaps** |
| 1. I can enlarge and reduce 2D and 3D objects
 |  |  | **4** | **Good understanding, some consistent errors** |
| 1. I can compare the properties of similar objects
 |  |  | **5** | **Great understanding, only minor errors** |
| 1. I can properties of lines and angle constructions
 |  |  | **6** | **I can teach this for Mrs. Becker next year ☺** |
| 1. I can calculate compound interest
 |  |  |  |  |  |  |
| 1. I can explain and calculate payments for purchases and leasing
 |  |  |  |  |  |  |
| 1. I can explain an calculate loan payments and investments
 |  |  | **Competencies**  |
| 1. I can calculate the measures of central tendency and standard deviation
 |  |  |  | **Puzzles** | **Scale** | **Angles** | **Statistics** | **Finance** |
| 1. I can use confidence intervals, z-score, and distributions to explain data
 |  |  | **Reasoning** |  |  |  |  |  |
| 1. I can graph the solution of a linear inequality
 |  |  | **Estimate** |  |  |  |  |  |
| 1. I can find the slope and intercepts of a linear inequality
 |  |  | **Communicate** |  |  |  |  |  |
| 1. I can find the intersection points of two linear equalities
 |  |  | **Multiple Methods**  |  |  |  |  |  |
| 1. I can communicate the characteristics of a quadratic function
 |  |  | **Reflection** |  |  |  |  |  |
| 1. I can apply quadratic functions to scenarios
 |  |  | **Represent Ideas** |  |  |  |  |  |
| 1. I can solve systems of equations with linear inequalities
 |  |  | **Tools & Technology** |  |  |  |  |  |
| 1. I can use optimization (of profit and area)
 |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  | **Learning** | **Level** | **Percent (%)** |
| **Work Ethic Expectations** |  |  | Expert | 6 | 95 | 97 | 100 |
| I have a growth mindset and am ready to learn |  |  | 5 | 86 | 90 | 94 |
| I am willing to learn from my mistakes |  |  | Apprentice | 4 | 73 | 80 | 85 |
| I am positive in class and a positive contributor to our learning environment |  |  | 3 | 60 | 66 | 72 |
| I ask questions and push the boundaries of my knowledge |  |  | Novice | 2 | 50 | 56 | 59 |
| I am a considerate team mate and work well with my learning partners |  |  | 1 | 30 | 40 | 45 |