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| Algebraic Reasoning, Unit 2: *Systems of Equations and Matrices* |
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Our Learning Goals:



**Sample Problem:**

The Yellow Cab company charges $2 plus an additional $3 for every 2 miles traveled. The Blue Cab company charges $5 plus $1 for every mile traveled. If you travel 2 miles, which company has the better rate? 3 miles? 10 miles?

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| Additional Support:* Check the teacher web page and Canvas page for notes, activities, and assignments.
* Search the topic on the web. We recommend using Khan Academy.
* Attend tutorials.
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We will…

* solve linear systems of equations with two and three variables by graphing, substitution and elimination.
* formulate systems of equations of real-world situations with two and three variables.
* add, subtract, multiply by a scalar, and multiply matrices with and without technology.
* solve linear systems of equations with two and three variables by matrices.

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| Why do we study this?* Many decisions we make in our everyday financial lives can be captured as a system of equations.
* Systems of equations can be used to find a break-even point and to determine the better deal.
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| Formative Assessments | Summative Assessments |
| Ongoing formative assessments during lesson and homework activities will help in monitoring learning and providing feedback for students.  | Summative assessments to measure learning at the end of concepts will include the following: * Test: Solving Systems by Graphing, Substitution, and Elimination
* Test: Solving Systems with 3 variables
* Test: Formulating Systems
* Unit 2 Exam (district-wide)
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How we will show what we have learned…