

Expectations

- 1.1 The student will model, analyze, and apply linear functions.
- 1.2 The student will model, analyze, and apply systems of linear equations and inequalities in two variables.

Essential Questions

Why are linear inequalities useful?

What methods can be used to solve systems of linear equations and inequalities?

How are systems of linear equations and inequalities useful?

Enduring Understandings

The characteristics of linear inequalities and their representations are useful in solving real-world problems.

Systems of linear equations and/or inequalities are used to model and solve real-world problems involving 2 variables.

Indicators

- 1.1.B.1 solve real-world problems using linear equations and inequalities.
- 1.2.B.1 model a real-world problem using a system of equations.
- 1.2.B.2 solve a system of equations numerically, algebraically, graphically, and using matrices.
- 1.2.B.3 perform operations on matrices.
- 1.2.B.4 represent a system of inequalities numerically, algebraically, and graphically.
- 1.2.B.5 solve a system of linear inequalities graphically.

Vocabulary

break-even point
consistent
corner point
dimension
half-plane
input
output
vertices