

Essential Questions**Why?**

1. What makes a relationship linear?
2. Why are linear functions useful?

Enduring Understanding

Relations and functions can be represented numerically, graphically, algebraically, and/or verbally.

Linear functions represent situations involving a constant rate of change.

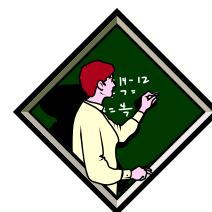
Expectations

Analyze a wide variety of patterns and functional relationships using the language of mathematics and appropriate technology.

Model and interpret real-world situations using the language of mathematics and appropriate technology.

What?**MCPS Indicators and Standards**

- 1.1.2.3 describe the effect of a change in the parameters a and b on the graph of a linear function $f(x) = ax + b$.
- 1.2.1 determine the equation for a line, solve linear equations, and/or describe the solutions using numbers, symbols, and/or graphs.
- 1.2.2 solve linear inequalities and describe the solutions using numbers, symbols, and/or graphs.
- 1.2.2. a graph an inequality, write and/or solve an inequality, or interpret an inequality in the context of a problem.
- 3.2.2 interpret data and/or make predications by finding and using a line of best fit and by using a given curve of best fit.

**Algebra**