

**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.

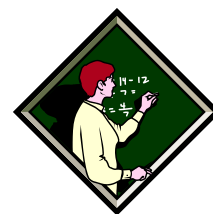
**Expectations**

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**

- 1.1.2.1 describe the effect of a change in the parameters  $a$  and  $b$  on the graph of a linear function  $f(x) = ax + b$ .
- 1.1.2.2 represent linear functions numerically, algebraically, and/or graphically.
- 1.2.1 determine the equation for a line, solve linear equations, and/or describe the solutions using numbers, symbols, and/or graphs.
- 1.2.1.2 interpret properties of linear functions, including rate of change, intercepts, and continuity, in the context of a real-world situation.

**Algebra**

