

Thinking with Mathematical Models/ Inv. 3 Overview

Investigation Three - Inverse Variation

A.PA.08.03b

Represent basic functions using tables, graphs, and formulas

A.RP.08.01a

Identify and represent linear functions using tables, graphs, and equations

A.RP.08.01c

Identify and represent other simple functions including inversely proportional relationships ($y = \frac{k}{x}$) using tables,

graphs, and equations

A.PA.08.02

For basic functions, e.g., simple quadratics, direct and indirect variation, and population growth, describe how changes in one variable affect the others

A.PA.07.09a

Recognize inversely proportional relationships in contextual situations

A.PA.07.09b

Know that quantities are inversely proportional if their product is constant, e.g., the length and width of a rectangle with fixed area

A.PA.07.09c

Know that an inversely proportional relationship is of the form $y = \frac{k}{x}$ where k is some non-zero number

A.RP.07.10a

Know that the graph of

$y = \frac{k}{x}$ is not a line

A.RP.07.10b

Know the shape of the graphs of $y = \frac{k}{x}$

A.RP.07.10c

Know that the graph of

$y = \frac{k}{x}$ crosses neither the x nor the y axis