

Multiple Representations: Tables to Equations and Graphs

Note-Taking Guide

TEKS

- 6(6)B) The student is expected to write an equation that represents the relationship between independent and dependent quantities from a table.
- 6(6)C) The student is expected to represent a given situation using verbal descriptions, tables, graphs, and equations in the form $y = kx$ or $y = x + b$.
- 7(4)A) The student is expected to represent constant rates of change in mathematical and real-world problems given pictorial, tabular, verbal, numeric, graphical, and algebraic representations, including $d = rt$.
- 7(7) The student is expected to represent linear relationships using verbal descriptions, tables, graphs, and equations that simplify to the form $y = mx + b$.
- 8(4)C) The student is expected to use data from a table or graph to determine the rate of change or slope and y-intercept in mathematical and real-world problems.
- 8(5)A) The student is expected to represent linear proportional situations with tables, graphs, and equations in the form of $y = kx$.
- 8(5)B) The student is expected to represent linear non-proportional situations with tables, graphs, and equations in the form of $y = mx + b$, where $b \neq 0$.
- 8(5)I) The student is expected to write an equation in the form $y = mx + b$ to model a linear relationship between two quantities using verbal, numerical, tabular, and graphical representations.

A line represents an _____ set of points that satisfy a _____ equation.
 A _____ of paired values represents only _____ of the points on a line.

x	$g(x)$
-12	$57\frac{1}{2}$
$-4\frac{3}{4}$	$21\frac{1}{4}$
$\frac{1}{4}$	$-3\frac{3}{4}$
2	$-12\frac{1}{2}$
$3\frac{3}{4}$	$-21\frac{1}{4}$

x	-8	-3.25	1	2.75	5.5
$g(x)$	-22.75	-8.5	4.25	9.5	17.75

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A process column _____

x	process	y
	→	

x	process	y
0		6
2		14
4		22
8		38
10		46

The content below may be used to generate mathematical relationships represented with paired values.

Grade 6	Grade 7	Grade 8	Algebra I
_____	Rates	_____	Point-slope formula
Rates	_____ Rates	y-intercept	$y - y_1 = m(x - x_1)$