9-1 Multiple Representations of Functions

Equation

$$p = 20n$$

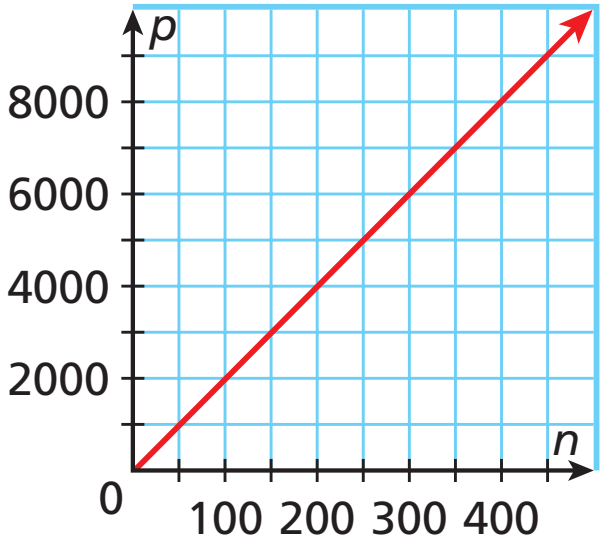
or

$$p(n) = 20n$$

Table

n	p
50	1000
100	2000
150	3000
200	4000

Graph



TEACHING TRANSPARENCY

9-1

Multiple Representations of Functions (continued)

Translating Between Multiple Representations	
When given a(n)...	**Try to...**
Table	• Find finite differences or ratios to determine which parent function best describes the data. • Graph points as ordered pairs and look for a pattern. • Match the data to the related parent function, if applicable, and perform a regression.
Graph	• Identify which parent function the graph most resembles, and then use key points (intercepts, maxima, minima, and so on) from the graph to help write an equation. • Locate several points on the graph and write them in a table. • Use slope; increasing, decreasing, or constant intervals; and intercepts to write a verbal description.
Equation	• Make a table of values. You may use a graphing calculator. • Make a graph by using transformations of parent functions or a graphing calculator.
Verbal Description	• Identify dependent and independent variables, and write an algebraic equation. • Generate a table of values by using the pattern described. • Sketch a graph of the situation by using hints from the description about increasing, decreasing, or constant intervals, as well as intercepts.