Name: _____

Independent and Dependent Variables
Writing Equations, Creating Tables & Graphs

Directions: Identify the dependent and independent variables for each scenario. Write an equation to represent the relationship between variables. Finally, create a table and a graph to show the constant relationships.

1. Gabrielle is saving money for a vacation. Each week she saves $40. Let s represent the total amount of money Gabrielle saves, and let w represent the number of weeks. Create a table and a graph to show how much money she would save from 1 to 7 weeks.
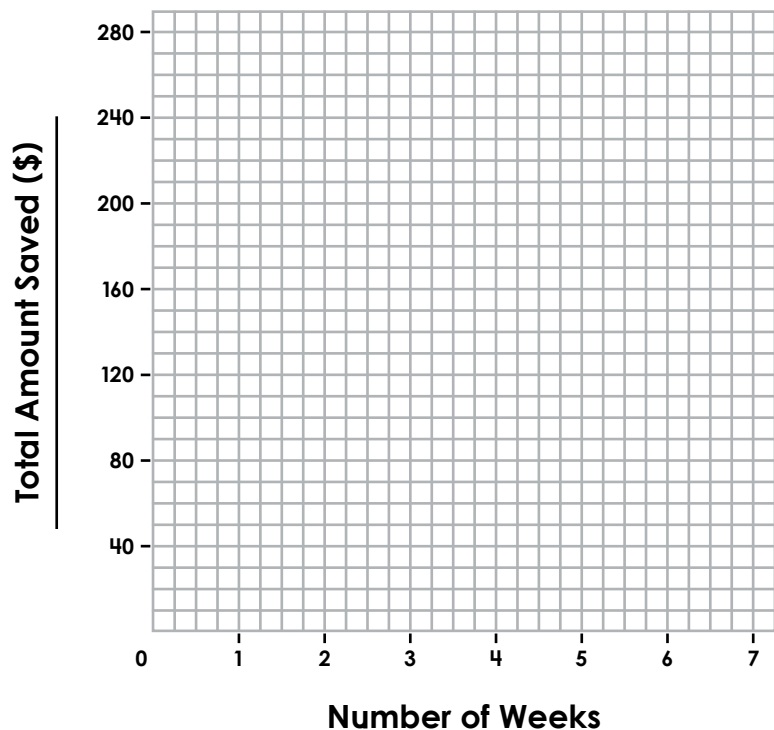
Number of Weeks	Total Amount Saved
w	$40w$ or s

x-axis   **y-axis**

Total Amount Saved ($)

280 –

240 –

200 –

160 –

120 –

80 –

40 –

0   1   2   3   4   5   6   7

Number of Weeks

Independent and Dependent Variables

Writing Equations, Creating Tables & Graphs

2. Nataliah can read 160 words per minute. Let *w* represent the total number of words Nataliah reads, and let *m* represent the number of minutes she spends reading. Create a table and a graph to show how many words Nataliah will read from 1 to 5 minutes. *Don't forget to label your axes.*
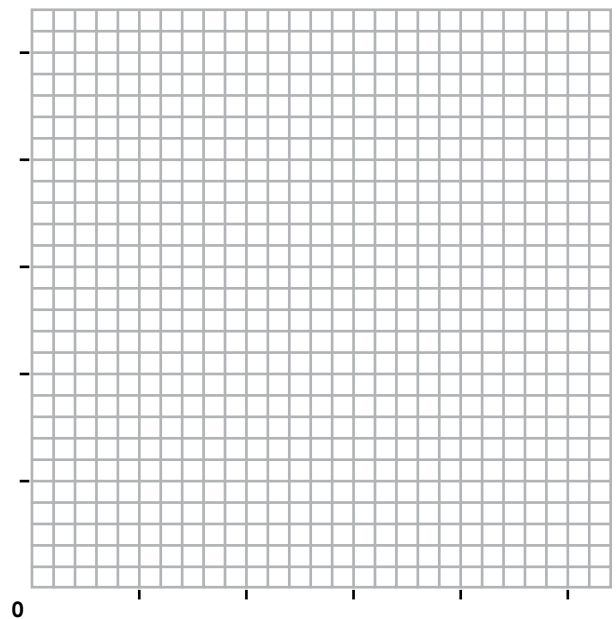
Dependent variable: _____

Independent variable: _____

0

Independent and Dependent Variables

Writing Equations, Creating Tables & Graphs

3. Zoe is shopping for fruit at the local farmer's market. She knows she wants to buy a bushel of peaches for $12.00, plus some plums. Plums cost $2.00 each. Create a table and a graph to show Zoe's total cost, *t*, when she buys 1 to 6 plums, *p*. *Don't forget to label your axes.*
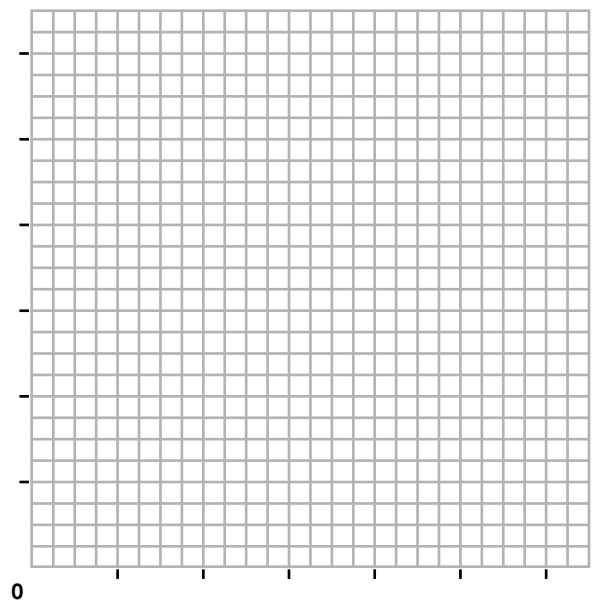
Dependent variable: _____

Independent variable: _____

Independent and Dependent Variables

Writing Equations, Creating Tables & Graphs

4. Jabari pays $45 per month for his cell phone bill. Let *t* represent Jabari's total cost, and let *m* represent the number of months. Create a table and a graph to show how much Jabari will pay for his cell phone for one year. *Don't forget to label your axes.*

Dependent variable: _____

Independent variable: _____

Equation: _____

Independent and Dependent Variables
Writing Equations, Creating Tables & Graphs

1. Dependent variable: _____total amount saved (s)_____

Independent variable: _____number of weeks (w)_____

2. Dependent variable: _____total words read (w)_____

Independent variable: _____number of minutes (m)_____

7	315
8	360
9	405
10	450
11	495
12	540

Number of Plums

Number of Months

KH