Lesson 31: Problems in Mathematical Terms

Problem Set

1. Jaziyah sells $3$ houses each month. To determine the number of houses she can sell in any given number of months, she uses the equation$ t=3m$, where $t$ is the total number of houses sold and $m$ is the number of months. Name the independent and dependent variables. Then, create a table to show how many houses she sells in fewer than $6$ months.

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1. Joshua spends $25$ minutes of each day reading. Let $d$ be the number of days that he reads, and let$ m$ represent the total minutes of reading. Determine which variable is independent and which is dependent. Then, write an equation that models the situation. Make a table showing the number of minutes spent reading over $7$ days.

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1. Each package of hot dog buns contains $8$ buns. Let $p$ be the number of packages of hot dog buns and $b$ be the total number of buns. Determine which variable is independent and which is dependent. Then, write an equation that models the situation, and make a table showing the number of hot dog buns in $3$ to $8$ packages.

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1. Emma was given $5$ seashells. Each week she collected $3$ more. Let $w$ be the number of weeks Emma collects seashells and $s$ be the number of seashells she has total. Which variable is independent, and which is dependent? Write an equation to model the relationship, and make a table to show how many seashells she has from week $4$ to week $10$.

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1. Emilia is shopping for fresh produce at a farmers’ market. She bought a watermelon for $\$5$, and she also wants to buy peppers. Each pepper is $\$0.75$. Let $t$ represent the total cost of the produce and $n$ be the number of peppers bought. Determine which variable is independent and which is dependent, and write an equation that models the situation. Then, make a table to show the cost for $1$ to $5$ peppers.

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1. A taxicab service charges a flat fee of $\$7$ plus an additional $\$1.25$ per mile driven. Show the relationship between the total cost and the number of miles driven. Which variable is independent, and which is dependent? Write an equation to model the relationship, and make a table to show the cost of $4$ to $10$ miles.

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