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| October 7, 2014 | Today’s Objective |
|  | **What is a rate of change?****What’s a proportional relationship?****What is a proportion?****Determining a proportional relationship:**Callie earns money by dog sitting. Based on the table, is the relationship between the amount Callie earns and the number of days a proportional relationship?

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| **Number of Days** | 1 | 2 | 3 | 4 | 5 |
| **Amount Earned ($)** | 16 | 32 | 48 | 64 | 80 |

Step 1: Write the rate.Step 2: Compare the rates. Are the rates equal or unequal?**What is a constant of proportionality?****Writing an equation for a proportional relationship:**Two pounds of cashews shown cost $19, and 8 pounds cost $76. Show thatthe relationship between the number of pounds of cashews and the cost is proportional relationship. Then write an equation for the relationship.Step 1: Make a table relating cost to pounds.

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| Number of Pounds |  |  |  |  |
| Costs ($) |  |  |  |  |

Step 2: Write the rates. Put cost in the numerator and pounds in the denominator. Then simplify each rate.Step 3: Write the equation. |