Identify each as discrete or continuous.

|  |  |  |
| --- | --- | --- |
| Tickets to a concert cost $20 each.  Discrete or Continuous? | Save Mart sells bananas for $1.19 per pound.  Discrete or Continuous? | The volume of water in a swimming pool steadily decreases at a rate of 15 gallons per minute.  Discrete or Continuous? |
|  |  | Image result for discrete or continuous worksheet exponential |
| Identify each of the graphs as discrete or continuous.  Image result for discrete or continuous worksheet exponential | | |

Write the missing part for each situation.

|  |  |  |
| --- | --- | --- |
| Verbal Description | Explicit Function | Recursive Function |
| The first term is 19 and you subtract 8 for each term. |  |  |
|  | f(n)=4(2)n-1 |  |
|  |  | f(1) = 100  f(n) = f(n-1)\* ½ |
| The fourth term is 56 and the pattern doubles with each step. |  |  |
|  | f(n) = 83 + 9(n – 1) |  |
|  |  | f(1) = -16  f(n) = f(n – 1) - 14 |

Write the equation for the function shown.

|  |  |  |
| --- | --- | --- |
|  | Linear or Exponential? | Equation for the function |
| https://lh6.googleusercontent.com/snepqn23__kSN0DPMImbN_C74juCf5JXpsdkpQG8XrrmGng4bRrz2sqPdDsfnEzcWUYM0cM2Y3tVOB3N8AnthycLbiDm2mZ7AbWBuZnw-o3HNIOf9w9aLiX3wAhHajeAJtFymPw |  |  |
| Image result for linear graph |  |  |
|  |  |  |
| https://www.superteachertools.net/jeopardyx/uploads/20140106/slopey.jpg |  |  |

Write an equation to represent the situation:

You are saving money for a summer trip. You have $80 already saved, but plan to add $15 per week to your savings. Write an equation showing the amount of money, M, you have saved after w weeks.