

Vacations

This problem gives you the chance to:

- analyze relationships using graphs and algebra

Here is some information about how some students are paying for their summer vacations.

Carla: Her mom gave her \$100 in January and Carla has saved \$25 every month since, starting in February.

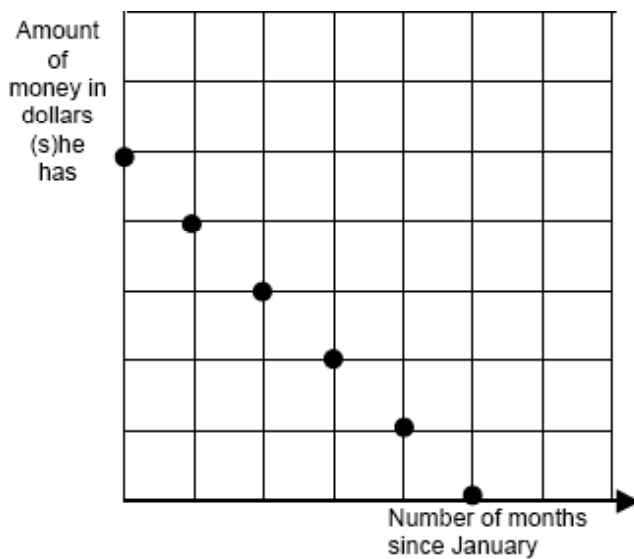
Arnie: Arnie put \$150 in his piggy bank in January.

Sue: Sue booked her vacation in January. She had \$250 in her piggy bank. Starting in February, she is paying \$50 each month to the travel company.

Ben: Starting in February, Ben saves \$30 every month.

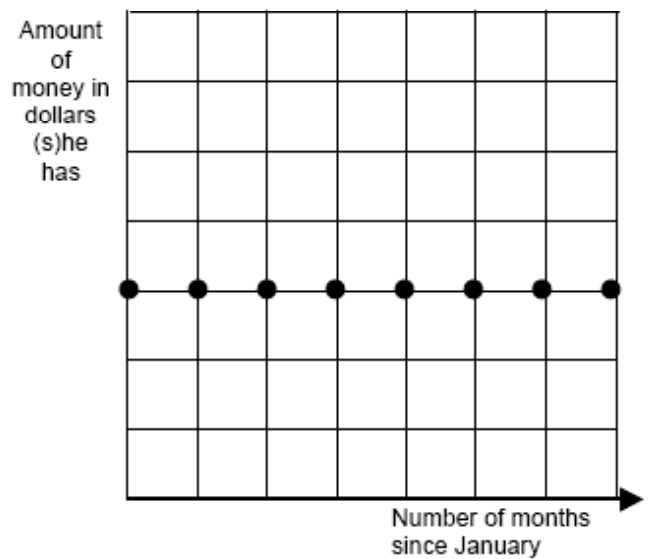
Here are some graphs illustrating these situations.

- Match each person with a graph and explain how you decided.



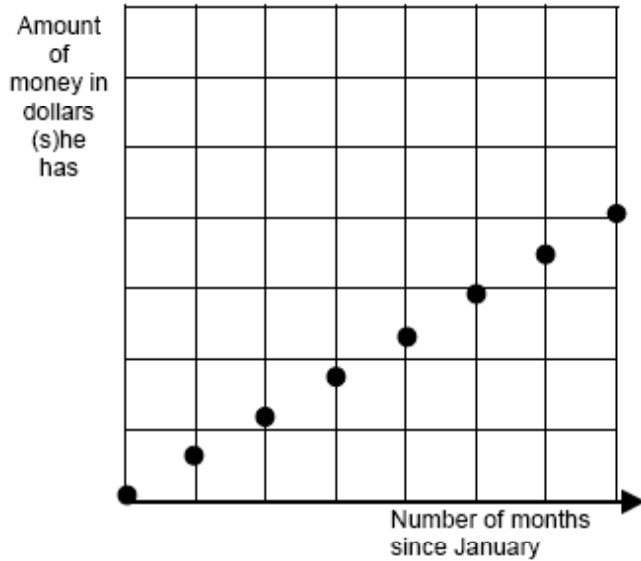
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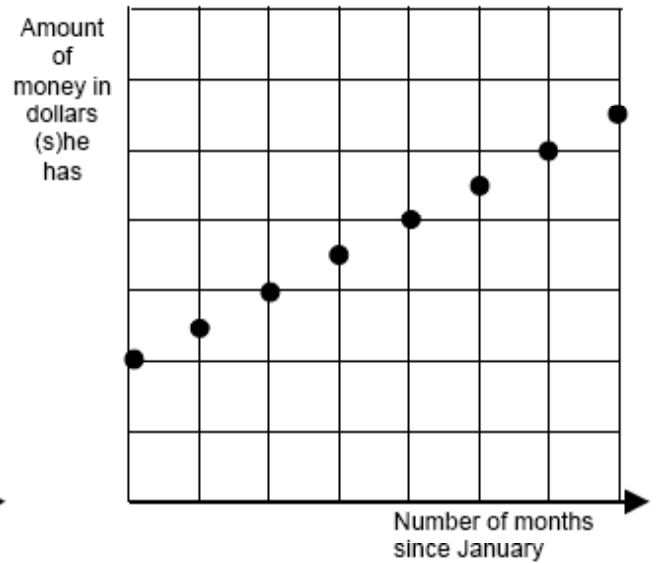
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2. In these equations, A is the amount of money and n is the number of months since January.

$$A = 250 - 50n$$

$$A = 30n$$

$$A = 150$$

- Find the person for each of these equations.
- Write a formula for the fourth person.

Carla _____

Arnie _____

Sue _____

Ben _____

3. Write a possible description for this formula: $A = 50n + 150$

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