

# Abuelo's Birthday



M2C3 Project 2018



# Abuelo's Birthday Task



Discuss in Small Groups

- In what situations have you been involved in sharing costs?
  - Think about situations with family, friends, siblings or coworkers. With family?
- How do you decide how much each person pays?
- What factors impact your decisions?



## Abuelo's 70th Birthday



It is Sr. Aguirre's 70<sup>th</sup> Birthday.

Four of his grandchildren want to buy him a gift.

They found a Photo Printer on sale for \$120.00.

They want to buy him the printer so he can print photos of family members.



## Abuelo's 70th Birthday



- Alex, a 9<sup>th</sup> grader, earns \$20 each week from babysitting jobs.
- Sam, a 6<sup>th</sup> grader, earns \$10 each week taking care of his neighbor's pets.
- Elena, a 4<sup>th</sup> grader, earns \$5 each week doing jobs for an aunt.
- Jaden, a 1<sup>st</sup> grader, has no weekly job but has saved \$8 in her piggy bank.



## Abuelo's 70th Birthday



One of the grandchildren says that they should split the cost of the printer among them and each pay the same amount.

Another grandchild says that it is not fair and they should each pay different amounts.

What do you think? What is *fair* in this situation?

# Abuelo's Birthday- Your Task



- Help the children make a plan to share costs in a fair way to buy the gift.
- Use mathematics to justify your conclusions.
- Your plan should work in other situations where family members want to share costs fairly.

# Abuelo's Birthday Task



- It is Sr. Aguirre's 70<sup>th</sup> Birthday.
- Four of his grandchildren want to buy him a gift.
- They found a Photo Printer on sale for \$119.99.
- They want to buy him the printer so he can print photos of family members.



# Abuelo's Birthday Task

- Alex, a 9th grader, has earnings from occasional babysitting that range from \$15-20 per week.
- Sam a 6th grader has a steady job taking care of neighbor's pets for \$10 per week.
- Elena, a 4th grader, waters plants and does odd jobs for an aunt who lives nearby and earns about \$5 per week.
- Jaden, a 1st grader has no weekly source of money but has saved \$8 in her piggy bank.





# Abuelo's Birthday Task

- One of the grandchildren says that they should split the cost of the printer among them and each pay the same amount.
- Another grandchild says that it is not fair and they should each pay different amounts.
- What do you think? What is *fair* in this situation?

# Abuelo's Birthday- Your Task



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- Use mathematics to justify your conclusions.
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Task adapted from : Julia M. Aguirre & Maria del Rosario Zavala  
(2013) Making Culturally Responsive Mathematics Teaching Explicit:  
A Lesson Analysis Tool, *Pedagogies: An International Journal*, 8:2,  
163-190, DOI: [10.1080/1554480X.2013.768518](https://doi.org/10.1080/1554480X.2013.768518)