

## When will the chocolate milk run out?

On the next page is the invoice that my friend got for his child's chocolate milk purchases at school. Let's look at the math. Use the invoice from the school to answer these questions.

1. What will the balance be after 1, 2, 3, 4, 5, 6, 7 and 8 chocolate milks? What can you create and use to organize your answers to this question?
2. After how many chocolate milks will he run out of money in his account?
3. Write an equation that gives the balance after any number of chocolate milks. Explain what each part of your equation represents.
4. Create a graph that models the relationship between number of chocolate milks and the balance. Be sure to include the point where the \$20 runs out.
5. How do you see the parts of your equation in your graph? Color-code them. For example, color-code the rate of change in the equation, graph and table. What else can you color-code?
6. At this rate how much do you think a whole school year worth of chocolate milk costs for this child?

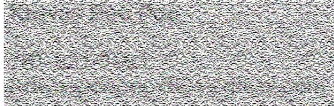


# INVOICE

Food Services

*Massachusetts Public Schools  
Cross Street  
Springfield, Massachusetts 01103  
181-231-1650*

BILL TO



Invoice Number: 

Invoice Date: November 1, 2018

Payment Due: November 16, 2018

Amount Due (USD): **(\$17.60)**

Items	Quantity	Price	Amount
Account Deposit	1	(\$20.00)	(\$20.00)
Chocolate Milk 10/12/18	1	\$0.40	\$0.40
Chocolate Milk 10/15/18	1	\$0.40	\$0.40
Chocolate Milk 10/19/18	1	\$0.40	\$0.40
Chocolate Milk 10/25/18	1	\$0.40	\$0.40
Chocolate Milk 10/29/18	1	\$0.40	\$0.40
Chocolate Milk 10/30/18	1	\$0.40	\$0.40

**Total:** (\$17.60)

**Amount Due (USD):** **(\$17.60)**