

# **DIG INTO REPRESENTATIONS: A BAGEL PROBLEM**

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## In this session, we will:

- examine multiple representations for displaying which is a better buy among two items
- make connections among representations

# A Context

SHMEAR 'N THINGS

4 bagels for \$3.00

HOLE-Y BREAD

5 bagels for \$4.00

What do you know?

What do you wonder?



# A Straightforward Question and Answer

SHMEAR 'N THINGS  
4 bagels for \$3.00

HOLE-Y BREAD  
5 bagels for \$4.00

Which is the better buy?

$$\left( \frac{3.00}{4} = 0.75 \right)$$

$$\left( \frac{4.00}{5} = 0.80 \right)$$

At Smear 'n Things, each bagel costs \$.75.

At Hole-y Bread, each bagel costs \$.80.

Therefore Smear 'N Things is the better buy.



**But there is so much more to learn  
from this context...**

# Tables

## SHMEAR 'N THINGS

4 bagels for \$3.00

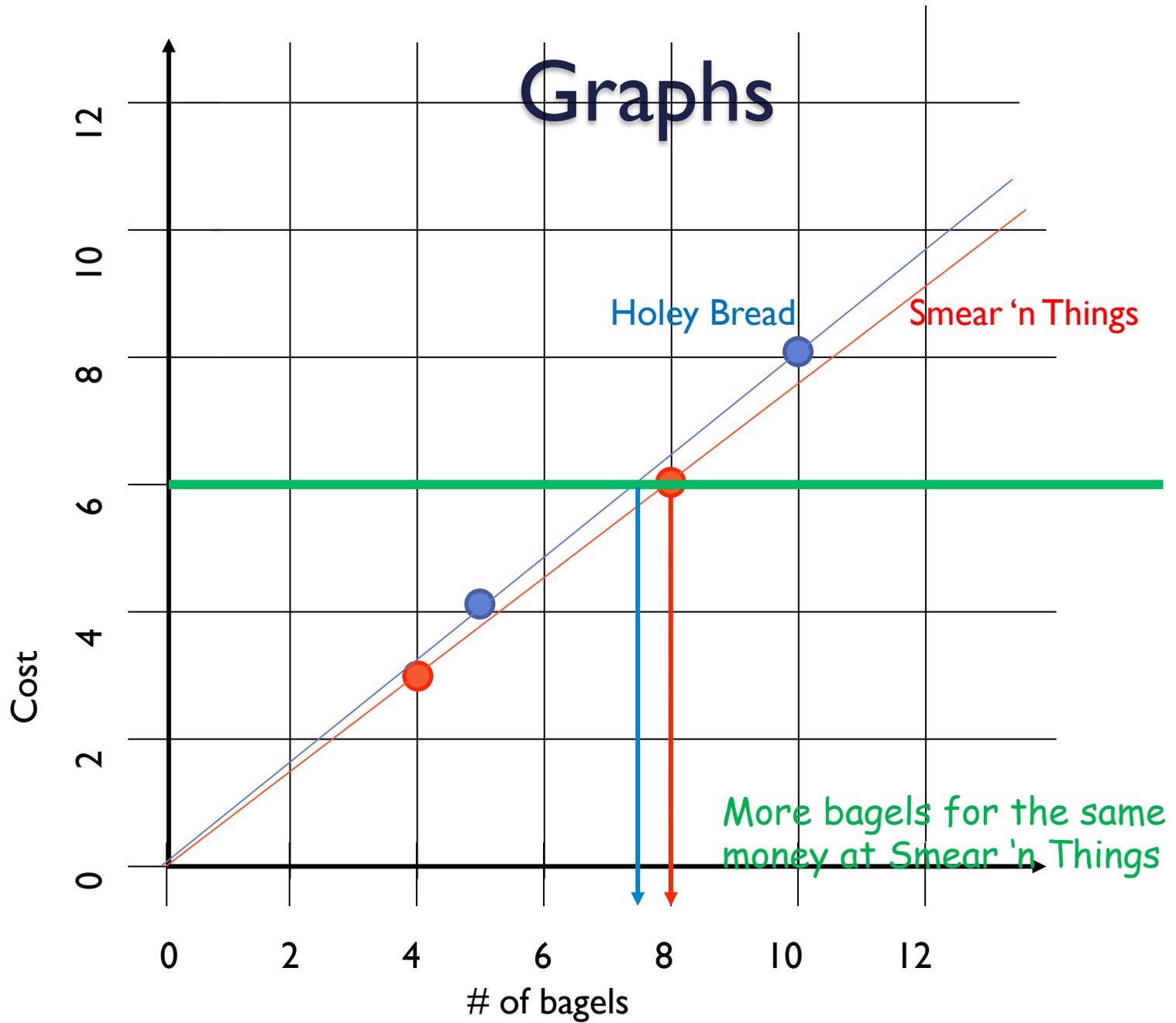
Shmear 'n Things	
# of bagels (x)	Cost in \$ (y)
4	3
8	6
16	12
2	1.50
10	7.50

## HOLE-Y BREAD

5 bagels for \$4.00

Hole-y Bread	
# of bagels (x)	Cost in \$ (y)
5	4
10	8
15	12
20	16
25	20

# Graphs



# Equations

## SHMEAR 'N THINGS

4 bagels for \$3.00

Shmear 'n Things	
# of bagels (x)	Cost in \$ (y)
4	3
8	6
16	12

## HOLE-Y BREAD

5 bagels for \$4.00

Hole-y Bread	
# of bagels (x)	Cost in \$ (y)
5	4
10	8
15	12

$$y = 0.75x$$

$$y = 0.80x$$

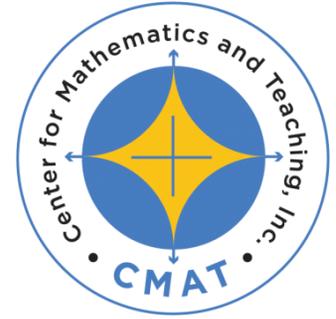
unit rate!



## In this session, we

- created tables, graphs, and equations to determine the better buy in a “best buy” context.
- explored connections among representations.

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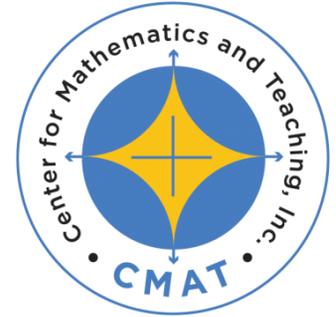
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- Comprehensive 6-8 curriculum
- Customized intervention grades 6-9
- Special Education programs
- Supplemental programs
- Professional development

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## THANK YOU!

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