

Login

What is yo

When poll is acti

 Poll Everywhere



Log in to activate or save changes to visuals.

Email or username

Password



Visual settings /

Show results 

to 22333 once to join

# TEACHING MATH WITH TECHNOLOGY - FOCUS ON ALGEBRA

Wisconsin Mathematics Council

May 3, 2019

327 YC Cummings

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# ALEXANDER HAMILTON HIGH SCHOOL

MILWAUKEE, WI

We are an urban high  
school with 1600 students.

-- Highly diverse student population --  
45% Hispanic; 34% African American;  
16% White; 5% Asian



**MILWAUKEE**  
PUBLIC SCHOOLS



UNIVERSITY of WISCONSIN  
**UWMILWAUKEE**

# WHY DO I LIKE TO USE TECHNOLOGY IN MY MATHEMATICS TEACHING?

Use of technology helps my students to be better learners:

- ▶ It scaffolds their learning, allowing them to see and do more than would be possible unassisted
- ▶ Good technology extends and enhances their mathematical abilities, offering a more level playing field
- ▶ It is inherently motivating, giving them more control over both their mathematics and the ways they learn it
- ▶ Good technology encourages them to ask more questions and offers insight into mathematical thinking and knowledge



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# IN TODAY'S SESSION, WE'LL DISCUSS...

Poll Everywhere

DESMOS

Quizlet Live

Motion Sensor

QR Codes



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# POLL EVERYWHERE

Poll Everywhere is a dynamic online polling platform that allows students to vote on custom teacher-generated polls through text messaging (SMS), smartphone, or computer.

- Ice breakers
- Formative Assessments
- Think Pair Share Activities



**Poll Everywhere**

## Instant Audience Feedback

How does Poll Everywhere work?

- Try voting on a multiple choice poll
- Text a question to the Q&A poll
- Watch the demo video

**1** You ask a question

**2** Audience answers using mobile phones, twitter, or web browser

**3** Responses are displayed live in Keynote, PowerPoint, or the web

**Create your first poll**  
Takes 30 seconds. No signup required.

**New Multiple Choice Poll**  
What is your favorite animal?

Answers	Keywords (T)
Lion	AUTO KEYWORD X
Turtle	AUTO KEYWORD
Giraffe	AUTO KEYWORD

Save new poll

What's Your Favorite Animal?  
Text your choice to 88888

Animal	Count
TURTLE	3
GRANDPA	1

Call: 88888  
Text: 88888  
Message: TURTLE

<https://www.polleverywhere.com/>



# QUICK RESPONSE CODES

Scavenger hunt  
Breakout boxes

QRSTUFF.COM

<https://www.qrstuff.com/index.html>



## Print based hypertext link

- ▶ Step 1 Select the type of QR code
- ▶ Step 2 Add the QR code content  
(the website URL, the Facebook page, the map location...)
- ▶ Step 3 Dynamic or Static QR code
- ▶ Step 4 Style your QR code
- ▶ Step 5 Download your QR code.

# MOTION SENSOR ACTIVITY

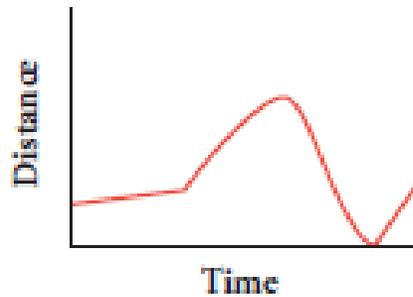


# APPLICATION PROBLEM

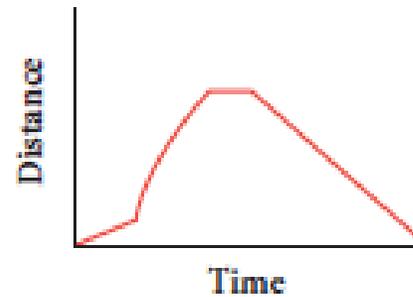
11. A turtle crawls steadily from its pond across the lawn. Then a small dog picks up the turtle and runs with it across the lawn. The dog slows down and finally drops the turtle. The turtle rests for a few minutes after this excitement. Then a young boy comes along, picks up the turtle, and slowly carries it back to the pond. Which of the graphs describes the turtle's distance from the pond?



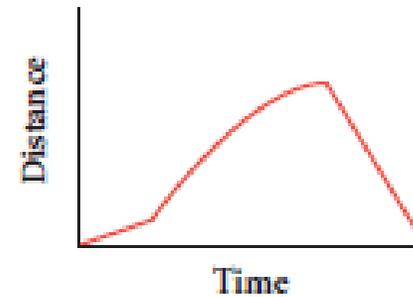
Graph A



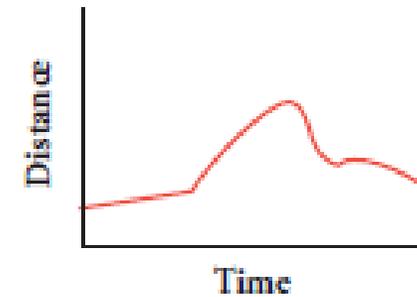
Graph B



Graph C



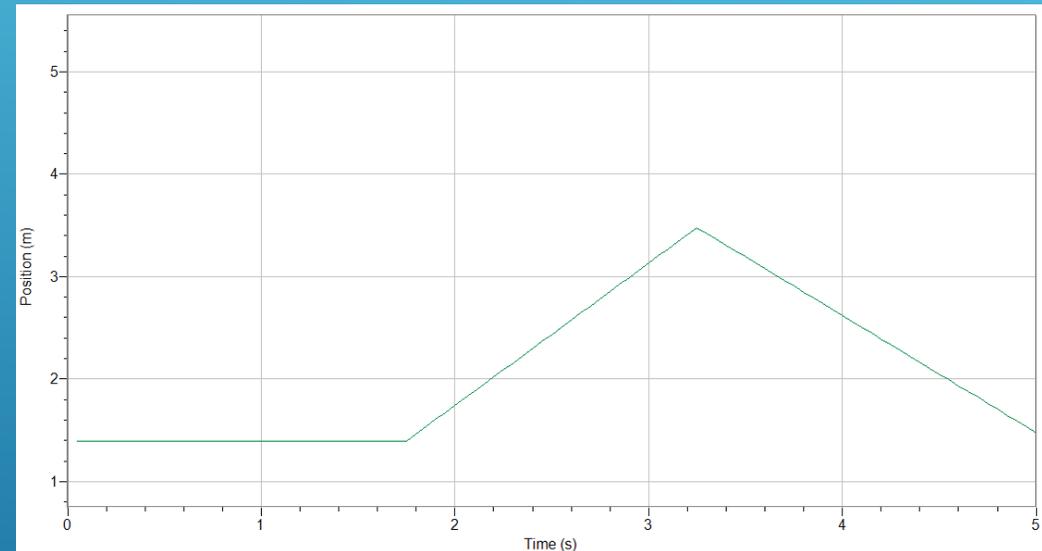
Graph D



# MOTION SENSOR ACTIVITY



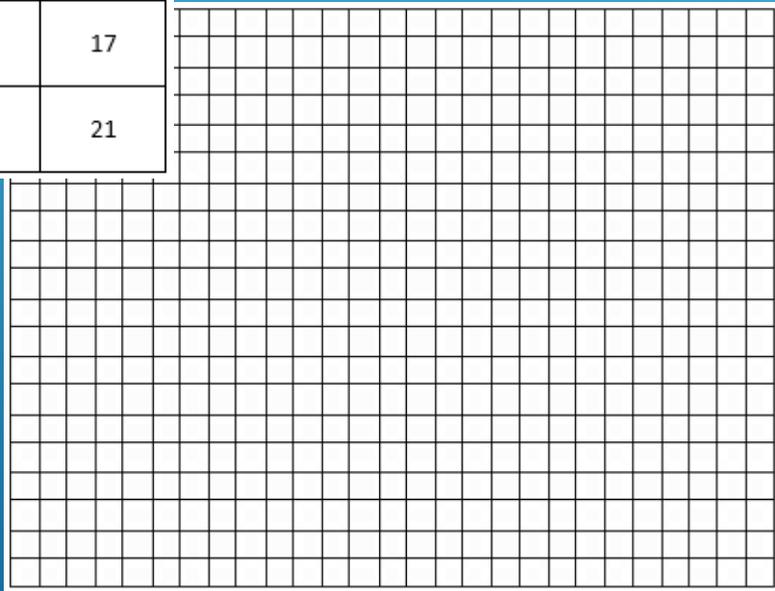
Can you create this graph by walking?



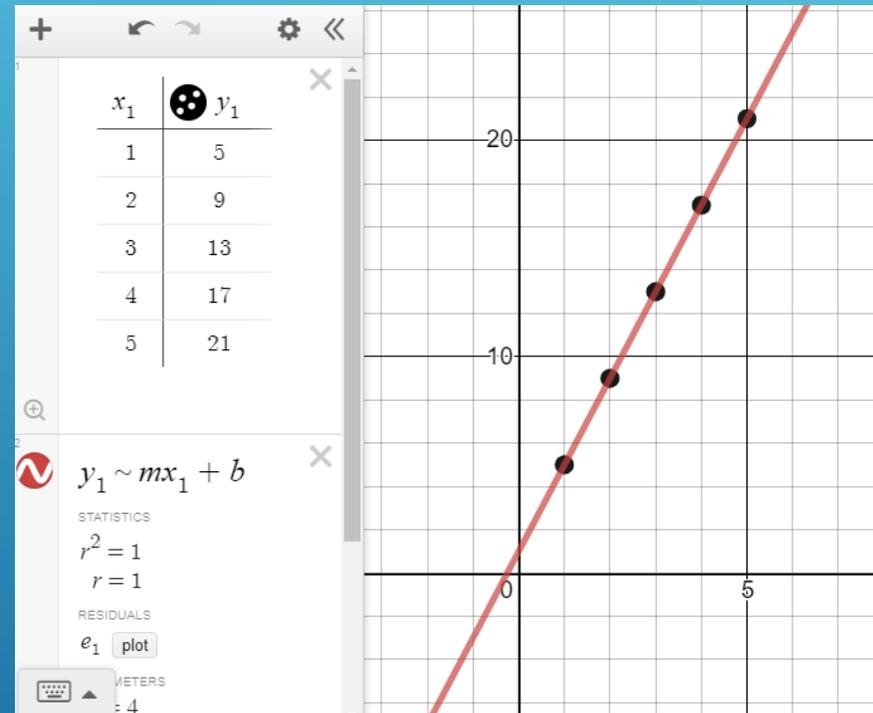
# DESMOS GRAPHING

Before DESMOS...

x	y
1	5
2	9
3	13
4	17
5	21



After DESMOS...



<https://www.desmos.com/calculator>

JS Search for an activity

Popular

Linear Bundle  
7 Activities

Key Understandings

- ✓ Rates of change express themselves as slope of a line, and as a coefficient of  $x$  in a linear equation.
- ✓ Y-intercepts express themselves as constants in linear equations.

Activities

This bundle presumes that students have some experience with the coordinate plane, and with plotting points on the coordinate plane. They may not know the terms slope have worked with algebraic variables. They know quite a bit about proportionality in general and rates in particular.



# DESMOS ACTIVITIES

A screenshot of a Quizlet match activity. It features a grid of cards. Some cards show a coordinate plane with a line graphed and the instruction "Match to the correct linear equation." Other cards display linear equations in slope-intercept form, such as  $y = x + 1$ ,  $y = 3x - 2$ ,  $y = 1/3x - 1$ ,  $y = 3x + 2$ ,  $y = 5x - 1$ , and  $y = -2x - 3$ .

Join at [www.quizlet.live](http://www.quizlet.live)

Enter this code:

5 1 6 - 8 5 0

QUIZLET.LIVE

QUIZLET.MATCH

**Graphing Linear Equations in Slope-Intercept Form**

**Rate of Change Review**

QUESTIONS???

