Using FREE online resources to engage every learner

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NSF

Kahoot! – An online quiz/survey tool

- Take out your electronic device (Smartphone, iPad, laptop, tablet) or find a friend to work with

- Go to Kahoot.it on your device and enter the game pin

Kahoot! – An online quiz/survey tool

- Uses: Formative assessment, check for understanding, review, FUN!
- Advantages: Free, easy to use, results can be downloaded, thousands available, easily modified to fit your class, mixed platforms
- Disadvantages: Small type, encourages speed, uses data on cell phone plans

TED and YouTube

- Video clips of all kinds to use as a springboard or demonstration.
- Can you predict my lesson?
- Kevin Allocca – Trends manager for YouTube
  http://www.ted.com/talks/kevin_allocca_why_videos_go_viral

TED and YouTube

- Uses: Springboards for lessons, math in the “real world”, FUN!
- Advantages – engaging, wide variety available
- Disadvantages – Ads on YouTube, buffering, finding a video to find a specific lesson

Desmos

- Online graphing calculator (think-Geogebra, but more student friendly)
- App for iPad/iPod/smart phone
- Teacher.desmos.com contains pre-made activities such as
  - Polygraph: use of precise language, deductive reasoning
  - Central Park: algebraic reasoning
  - Function Carnival/Water Line: functions, modeling
  - Tile Pile: proportional reasoning
  - Des-man: Functions, graphs, domain

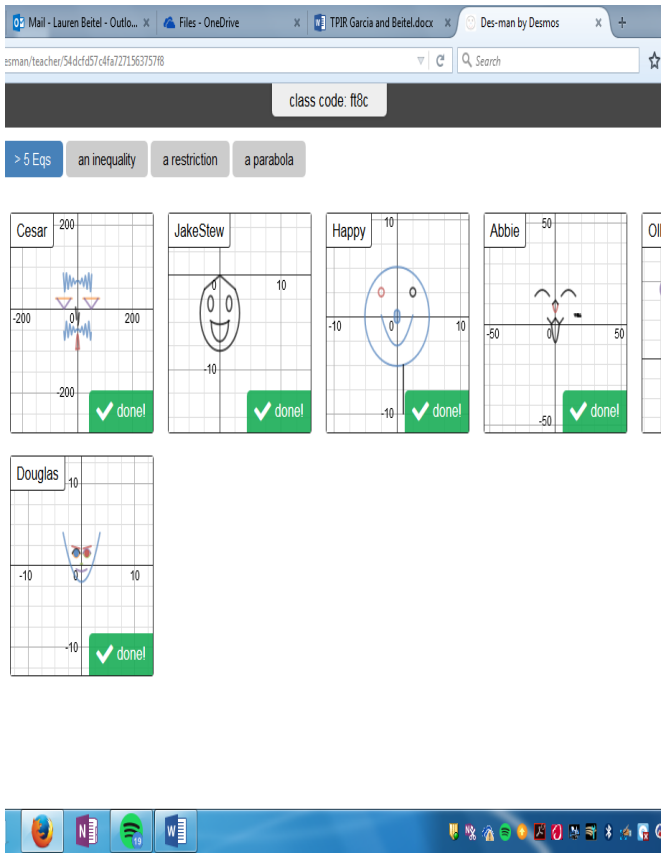
Desmos: Des-man

- Practice transforming parent function graphs and restricting domain
- Good for Algebra 2 or Pre-Calculus
- On your smart phones/laptops/tablets:

1) Go to: **student.desmos.com**

2) Type in your class code: **3smf**

Desmos: Des-man



- For all activities, teacher sees real-time progress of students

Circus Act

High Dive – The Circus Act Problem Activity #1

The Circus Act

You may have seen or heard about the circus act in which someone dives off a high platform into a small tub of water. Well, the Interactive Circus Troupe has come up with a new wrinkle on this act.

They have attached the diver's platform to one of the seats on a Ferris wheel, so that it sticks out horizontally, perpendicular to the plane of the Ferris wheel. The tub of water is on a moving cart that runs along a track, parallel to the plane of the Ferris wheel, and passes under the end of the platform.

As the Ferris wheel turns, an assistant holds the diver by the ankles. The assistant must let go at exactly the right moment, so that the diver will land in the moving tub of water.

If you were the diver, would you want to trust your assistant's on-the-spot judgment? A slight error and you could get a "splat!" instead of a "splash!"

Activity Builder

- Add free response questions, and graphing screens, tailored to what you want the students to learn.
- Used for formative assessment, immediate feedback (or sub plans!)

Question #2

What do you notice about the shape of the graph being formed by the points you are adding? (Use words like coterminal, periodic, range)

It's a curve that repeats every 2pi since sine is periodic with a period of 2pi. It goes up to positive one, then down to negative one, then repeats. All coterminal angles have the same y-value.

Edit Response

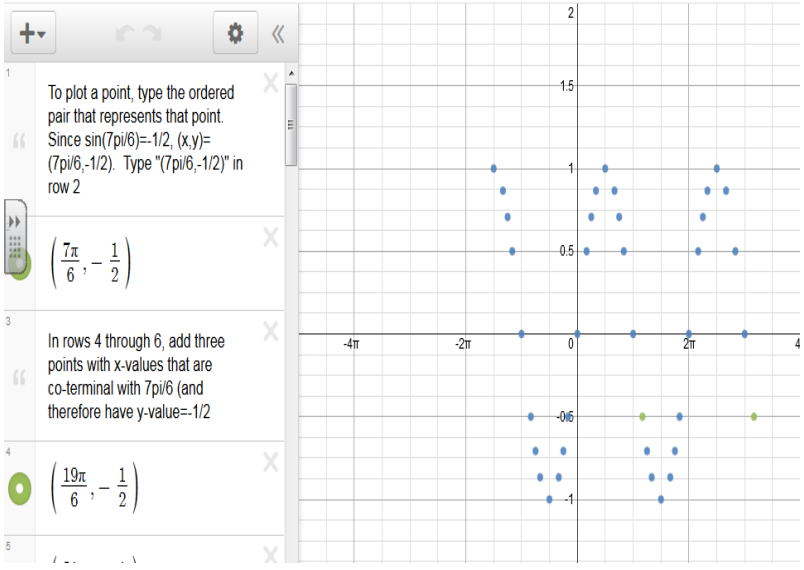
Other students said:

GABBIE B
I notice that when you add points that are coterminal to the previous points, it creates a heart beat or roller coaster type shape. There are curves that move high and low. It is periodic

GELSEY T.
I noticed that it's curved and repeats itself so it'd be periodic.

PAUL P
It is a bunch of wavy lines that repeat every 2pi, which the period. Quite wavy.

Graphing sin(x)



What FREE resources do YOU love?

- Questions?
- Thanks!
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