

Algebra I – Solving Systems by Graphing

Desmos.com activity instructions

Activity

Go to www.desmos.com

Graph each pair of linear equations and find the solution by clicking on the point of intersection. Take a screenshot of each pair before clearing your graphs to do the next problem. Repeat for each problem. When you are finished, email your explanation for #4 to Mrs. Cummins and attach the 4 screen shots of your graphs.

1. $2x + y = -2$
 $y = -3x - 5$

2. $y = x - 12$
 $2x + 3y = 6$

3. $y = 5$
 $3x + y = 5$

4. David decides to rent a bike while on vacation. There are two shops from which to choose. Rent-a-Bike charges \$10 per hour per bike. Bike-O-Rama charges only \$4 per hour per bike, but with a deposit of \$15. Which is the better deal?
- Write an equation for the cost of renting at each shop and graph online.
 - Find the point of intersection (you may need to zoom out).
 - Take a screenshot
 - In your email, explain which bike shop is the better deal depending on the number of hours you rent the bike.

Evaluation Checklist

_____ Email 4 screenshots to Mrs. Cummins

_____ Each screenshot shows 2 equations listed at left of screen

_____ Each screenshot shows 2 graphed lines

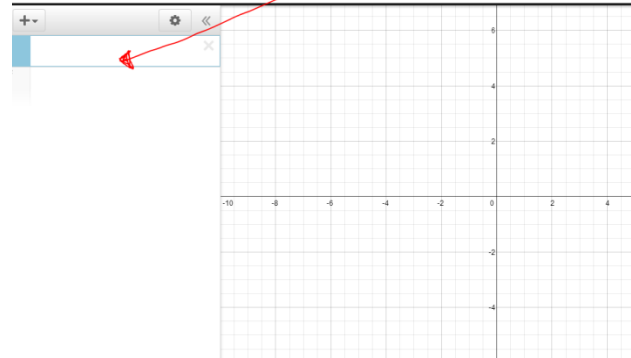
_____ Each screenshot shows the coordinates of the point of intersection

_____ Thorough explanation is provided in the email for question #4d

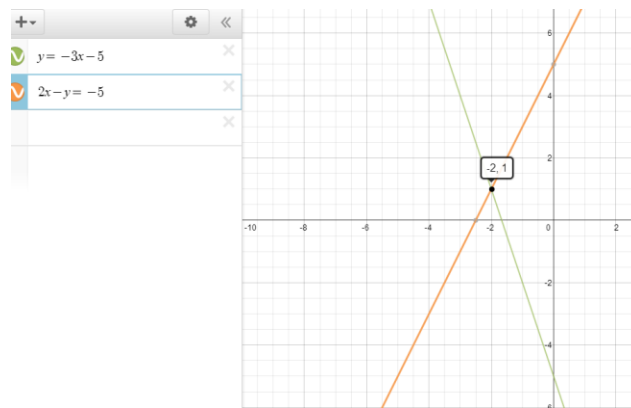
Instructions

Go to www.desmos.com and click “Launch Calculator”


To enter equations, type each in its own line on the left. The graphs will appear on the grid.



To find the point of intersection, just click on the point. The coordinates of the solution will appear.



To take a screen capture in Chromebook

- Hold ctrl and  (located at the top center of the keyboard)
- Screen capture can be found by clicking at the bottom left Apps – Files – Downloads

To clear the graphs, click on the X next to each equation.

To email your screen shots, go to Bears Den, compose an email to Mrs. Cummins and click on the paper clip to attach them.