

This document is available at bit.ly/desmos-cl-hunt.

Overview

Level up your Desmos Computation Layer skills by completing the challenges below. (You may find [the Computation Layer documentation](#) helpful.)

1. Create a note and an input. The input is for the student's name. When the student presses submit on the input, the note says, "Hello, [student's name]. It's been [number of seconds] since the you pressed 'Submit.'" [\[Solution\]](#)
2. Create a graph component and a note component. In the graph the student moves a movable point. In the note, you tell the student ... [\[Solution\]](#)
 - a. ... the point's ordered pair.
 - b. ... whether or not the point is above or below the x -axis.
3. Copy student thinking from an input component from one screen to a later screen for more reflection. [\[Solution\]](#)
4. Create a graph component and a table with two columns. When students type values into the table, you plot those points on the table. (Bonus: Can you make it so the graph *always* displays the points the student wants, no matter how large its coordinates? So it zooms out, basically?) [\[Solution\]](#)
5. Ask a student for her favorite number. Now represent that number as a point on the number line in a graph component. [\[Solution\]](#)
6. Make an animation play after a button is pressed. [\[Solution\]](#)
7. Gather student data in two math inputs. Now represent their data as a point on a graph, including a label like "Your Height." [\[Solution\]](#)
8. Click a button and ...
 - a. ... see a new random point in the first quadrant. [\[Solution\]](#)
 - b. ... zoom out gradually from a close-up on a local maximum, coming to a stop at a view somewhere farther above the graph. [\[Solution\]](#)
9. Plot points from a table component. (Bonus: Plot a function from a table.) [\[Solution\]](#)
10. Plot a graph from a math input component. (Bonus: Don't display the function until the student presses the "Submit" button.) [\[Solution\]](#)

Desmos Computation Layer

Scavenger Hunt

11. Display a different image based on a student's multiple choice selection. [[Solution](#)]
12. Show in a note the coordinates of a movable point that travels along a parabola in the graph window. [[Solution](#)]
13. Display a different graph based on a multiple choice selection. Eg. "linear," "quadratic," "exponential." (Bonus: include movable points to manipulate the function selected. Display the equation of the function in the note.) [[Solution](#)]
14. Create a bar chart that displays the aggregate student responses to a multiple choice selection. [[Solution](#)]
15. Create and complete a scavenger hunt challenge that isn't listed here!