

**Example Item 3B.2c (Grade 8)**

Primary Target 3B (Content Domain EE), Secondary Target 1D (CCSS 8.EE.C), Tertiary Target 3F, Quaternary Target 3G

**Part A**Is it possible for three linear equations in  $x$  and  $y$  to have a solution common to all three? [drop-down choices: yes, no]**Part B**

[If "yes" is selected] Use the Arrow tool to draw the graphs of three equations that have a common solution. Add a point that represents the common solution.

[If "no" is selected] Explain why this is not possible in the response box.

**Interaction:** The student has to select yes or no before seeing Part B. If the student selects "yes" then he/she sees the graphing tools and is asked to graph the system. If he/she selects "no" there is a text box that asks for an explanation as to it is not possible. The student can change his/her mind.

**Rubric:** (1 point) The student selects "yes" and draws three lines that intersect in a single point and places a point at the intersection of the three lines (it is allowable for the lines to coincide, but they have to draw three graphs).

**Response Type:** Drop-Down Menu<sup>6</sup> and Graphing/Short-Text

**Note:** Functionality for this item type does not currently exist but it could be implemented by showing Parts A and B simultaneously. When possible, the point of having a student try to explain his or her incorrect reasoning is that in the process of trying to construct an argument, he or she may self-correct.

**Task Model 3B.3**

- Items for this target require students to solve a multi-step, well-posed problem involving the application of mathematics to a real-world context.
- The difference between Claim 2 task models and this task model is that the student needs to provide some evidence of his/her reasoning. The difference between Claim 4 task models and this task model is that the problem is completely well posed and no extraneous information is given.

---

<sup>6</sup> Drop-Down Menu response type is not yet available in the Smarter Balanced item authoring tool, but it is a scheduled enhancement by 2017.