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Resource ID#: 43582

Primary Type: Problem-Solving Task

Solution Sets

The typical system of equations or inequalities problem gives the system and asks for the graph of the solution. This task turns the problem around. It gives a solution set and asks for the system that corresponds to it. The purpose of this task is to give students a chance to go beyond the typical problem and make the connections between points in the coordinate plane and solutions to inequalities and equations. Students have to focus on what the graph is showing. When you are describing a region, why does the inequality have to go one way or another? When you pick a point that clearly lies in a region, what has to be true about its coordinates so that it satisfies the associated system of inequalities?

Solution Sets (Microsoft Word): This file includes the task and related information in Microsoft Word format.
Solution Sets (PDF): This file includes the task and related information in PDF format.

General Information

Subject(s): Mathematics

Grade Level(s): 9, 10, 11, 12

Intended Audience: [Educators](#), [Students](#), [Parents](#)

Suggested Technology: Adobe Acrobat Reader, Microsoft Office

Freely Available: Yes

Keywords: Solution sets, equations, inequalities, cpalms, icpalms, illustrativemathematics.org, illustrative mathematics, tasks, mathematics, math, resource, free, freely available, problems-based learning, student activities, Florida Standards

Instructional Component Type(s): [Problem-Solving Task](#)

Resource Collection: Illustrative Mathematics

Source and Access Information

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District/Organization of Contributor(s): Leon

Is this Resource freely Available? Yes

Access Privileges: Public

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Aligned Standards

Name	Description
MAFS.912.A-REI.4.12:	Graph the solutions to a linear inequality in two variables as a half-plane (excluding the boundary in the case of a strict inequality), and graph the solution set to a system of linear inequalities in two variables as the intersection of the corresponding half-planes.