This page includes an additional set of info gap cards
to use as an optional demonstration.

Cards for the student activity are located on the following page.

Info Gap: Linear Systems
Problem Card 0

$$\begin{cases} y = \text{-}3x + 2 \\ ax + by = 1 \end{cases}$$

What are the values of
a and b?

Info Gap: Linear Systems
Data Card 0

- The point (0,2) is a solution.
- The second equation has a slope of -3.
- The point (1,-1) is a solution.
- $0 < b < 1$
- There are infinitely many solutions.

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Problem Card 1

The first equation in the system has a slope of 3.

How many solutions does the system have? If there is 1 solution, find it. Explain your reasoning.

Data Card 1

- The slope of the second equation is 3.
- The point (1, -3) is on the first line.
- The point (2, 13) is on the second line.
- The y-intercept of the second equation has a y value of 7.
- An intercept for the first equation has an x value of 2.

Problem Card 2

The solution to a system of equations is (4,3).

What are the two linear equations in the system? Write one equation in standard form ($Ax + By = C$) and the other equation in slope-intercept form ($y = mx + b$).

Data Card 2

- The first equation has an intercept at (0,-5).
- The second equation has intercepts at (0,6) and (8,0).
- The second equation has a slope of $\frac{-3}{4}$.