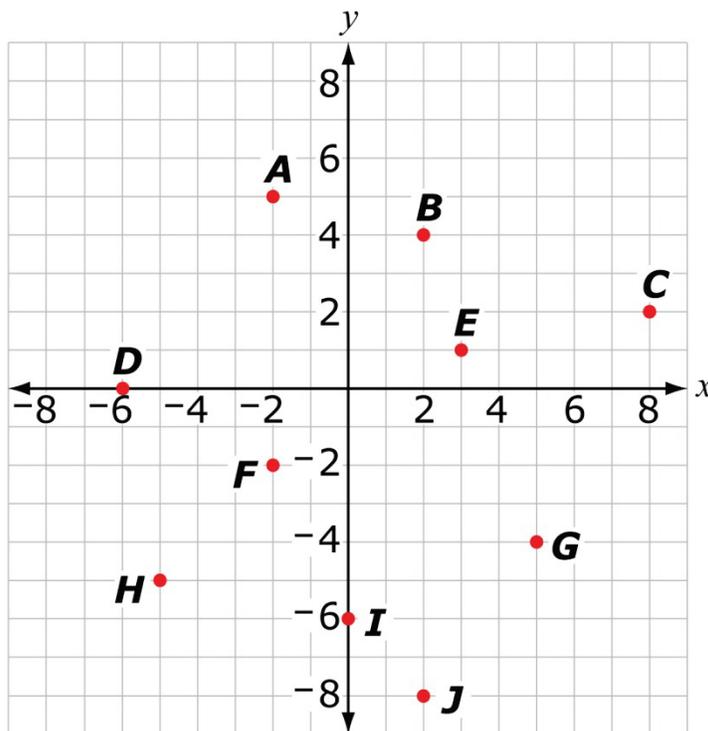


**MAT.HS.SR.1.0AREI.J.012**

Sample Item ID:	MAT.HS.SR.1.0AREI.J.012
Grade:	HS
Claim(s):	<b>Claim 1: Concepts and Procedures</b> Students can explain and apply mathematical concepts and carry out mathematical procedures with precision and fluency.
Assessment Target(s):	1 J: Represent and solve equations and inequalities graphically.
Content Domain:	Algebra
Standard(s):	A-REI.12
Mathematical Practice(s):	1, 2, 6
DOK:	2
Item Type:	SR
Score Points:	2
Difficulty:	M
Key:	G and J only
Stimulus/Source:	
Target-specific attributes (e.g., accessibility issues):	
Notes:	Multi-Answer Item

The coordinate grid below shows points A through J.



Given the system of inequalities shown below, select all the points that are solutions to this system of inequalities.

$$\begin{cases} x + y < 3 \\ 2x - y > 6 \end{cases}$$

- A       B       C       D       E
- F       G       H       I       J

*Scoring Rubric for Multi-Part Items:*

*Responses to this item will receive 0-2 points, based on the following:*

**2 points:** The student has a solid understanding of how to determine whether a set of given points is part of the solution to a system of linear inequalities. The student identifies the two correct points, *G* and *J*. The student also recognizes that points that lie in the excluded boundary or on only one of two inequalities are not solutions.

**1 point:** The student has only a basic understanding of how to determine whether a set of given points is part of the solution to a system of linear inequalities. The student identifies the two correct points, *G* and *J*, but does not recognize that points that lie in the excluded boundary or on only one of two inequalities are not solutions and may select points *A* and/or *I* as well.

**0 points:** The student demonstrates inconsistent understanding of how to determine whether a set of given points is part of the solution to a system of linear inequalities. The student identifies no correct points or only one correct point. The student also does not recognize that points that lie in the excluded boundary or on only one of two inequalities are not solutions.

*Rationale for choosing incorrect points:*

*A & I* – The student confuses a point lying on one of the inequalities with being a solution to the system of inequalities.

*B & E* – The student does not understand how to shade sides of the inequalities.

*C* – The student incorrectly shades the side of the first inequality in the system.

*D, F, & H* – The student incorrectly shades the side of the second inequality in the system.