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## A.A.40: Systems of Linear Inequalities: Determine whether a given point is in the solution set of a system of linear inequalities

1 Which ordered pair is in the solution set of the following system of inequalities?

$$
\begin{aligned}
& y<\frac{1}{2} x+4 \\
& y \geq-x+1
\end{aligned}
$$

1) $(-5,3)$
2) $(0,4)$
3) $(3,-5)$
4) $(4,0)$

2 Which ordered pair is in the solution set of the following system of linear inequalities?

$$
\begin{aligned}
& y<2 x+2 \\
& y \geq-x-1
\end{aligned}
$$

1) $(0,3)$
2) $(2,0)$
3) $(-1,0)$
4) $(-1,-4)$

3 Which coordinates represent a point in the solution set of the system of inequalities shown below?

$$
\begin{gathered}
y \leq \frac{1}{2} x+13 \\
4 x+2 y>3
\end{gathered}
$$

1) $(-4,1)$
2) $(-2,2)$
3) $(1,-4)$
4) $(2,-2)$

4 Which ordered pair is in the solution set of the system of inequalities $y \leq 3 x+1$ and $x-y>1$ ?

1) $(-1,-2)$
2) $(2,-1)$
3) $(1,2)$
4) $(-1,2)$

5 Which ordered pair is in the solution set of the system of linear inequalities graphed below?


1) $(1,-4)$
2) $(-5,7)$
3) $(5,3)$
4) $(-7,-2)$
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6 Which point is a solution for the system of inequalities shown on the accompanying graph?


1) $(-4,-1)$
2) $(2,3)$
3) $(1,1)$
4) $(-2,2)$

7 Which point is in the solution set of the system of inequalities shown in the accompanying graph?


1) $(0,4)$
2) $(2,4)$
3) $(-4,1)$
4) $(4,-1)$

8 Which coordinate point is in the solution set for the system of inequalities shown in the accompanying graph?


1) $(3,1)$
2) $(2,2)$
3) $(1,-1)$
4) $(0,1)$

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9 Which ordered pair is in the solution set of the system of inequalities shown in the accompanying graph?


1) $(0,0)$
2) $(0,1)$
3) $(1,5)$
4) $(3,2)$

10 Which point is in the solution set of the system of inequalities shown on the accompanying graph?


1) $(0,0)$
2) $(3,3)$
3) $(5,2)$
4) $(2,3)$

11 Which ordered pair is in the solution set of the system of inequalities shown in the graph below?


1) $(-2,-1)$
2) $(-2,2)$
3) $(-2,-4)$
4) $(2,-2)$
A.A.40: Systems of Linear Inequalities: Determine whether a given point is in the solution set of a system of linear inequalities
Answer Section

| 1 | ANS: 4 | REF: 080825ia |  |
| ---: | :--- | ---: | :--- |
| 2 | ANS: 2 | REF: 011023ia |  |
| 3 | ANS: 4 | REF: 061222ia |  |
| 4 | ANS: 2 |  |  |
|  | $-1 \leq 3(2)+1.2-(-1)>1$ |  |  |
|  | $-1 \leq 7$ | $3>1$ |  |
|  |  |  |  |
|  | REF: 011323ia |  |  |
| 5 | ANS: 1 | REF: 061010ia |  |
| 6 | ANS: 1 | REF: 010922a |  |
| 7 | ANS: 3 | REF: 010528a |  |
| 8 | ANS: 1 | REF: 060620a |  |
| 9 | ANS: 4 | REF: 080615a |  |
| 10 | ANS: 3 | REF: 080822a |  |
| 11 | ANS: 2 | REF: 081127ia |  |

