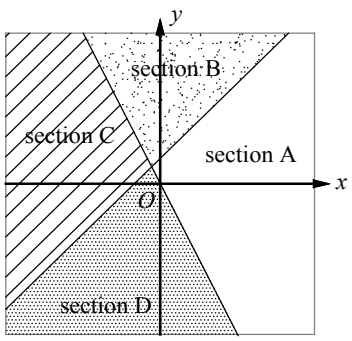
Exercises - Graphing Systems of Inequalities

1

$$\begin{cases} y - x \geq 1 \\ y \leq -2x \end{cases}$$



A system of inequalities and a graph are shown above. Which section or sections of the graph could represent all of the solutions to the system?

A) Section A

B) Section B

C) Section C

D) Section D

2

Which of the following ordered pairs (x, y) is a solution to the system of inequalities $y > x - 4$ and $x + y < 5$?

A) $(4, -2)$

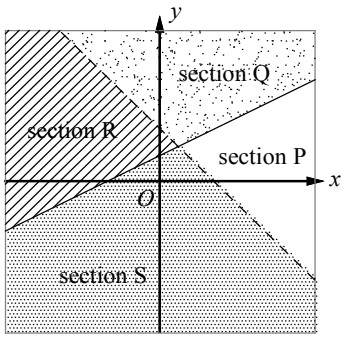
B) $(0, 2)$

C) $(5, 3)$

D) $(0, -5)$

3

$$\begin{cases} x - 2y \leq -2 \\ y < -x + 2 \end{cases}$$



A system of inequalities and a graph are shown above. Which section or sections of the graph could represent all of the solutions to the system?

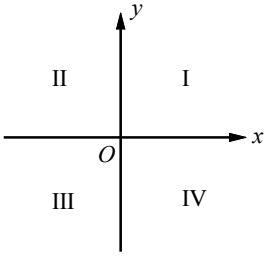
A) Section P

B) Section Q

C) Section R

D) Section S

4



If the system of inequalities $2 - y < 2x$ and $-x \leq 4 - y$ is graphed on the xy- plane above, which quadrant contains no solutions to the system?

A) Quadrant II

B) Quadrant III

C) Quadrant IV

D) There are solutions in all four quadrants.