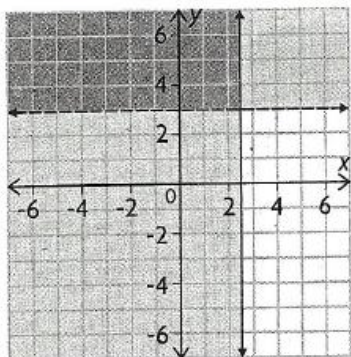


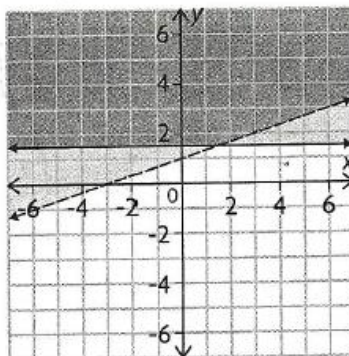
Worksheet: Graphing Systems of Linear Inequalities

1. Match each graph with the correct system of linear inequalities.

a) _____



b) _____



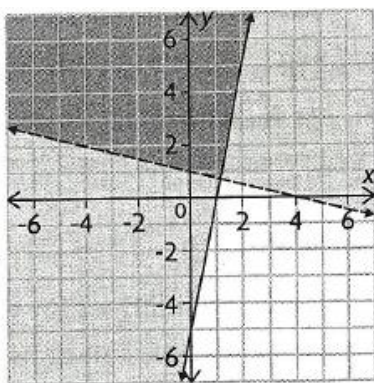
i) $\{(x, y) \mid x \leq 2.5, x \in \mathbb{R}, y \in \mathbb{R}\}$

ii) $\{(x, y) \mid y \geq 1.5, x \in \mathbb{R}, y \in \mathbb{R}\}$

$\{(x, y) \mid y > 3, x \in \mathbb{R}, y \in \mathbb{R}\}$

$\{(x, y) \mid 3y - x > 3, x \in \mathbb{R}, y \in \mathbb{R}\}$

2. State three sets of coordinates that lie in the solution region shown



3. Graph each system of linear inequalities.

a) $\{(x, y) \mid x > -3, x \in \mathbb{R}, y \in \mathbb{R}\}$

b) $\{(x, y) \mid 2x + y \leq 4, x \in \mathbb{W}, y \in \mathbb{W}\}$

$\{(x, y) \mid x + y \leq 2, x \in \mathbb{R}, y \in \mathbb{R}\}$

$\{(x, y) \mid x > 1.5, x \in \mathbb{W}, y \in \mathbb{W}\}$

4. Suppose you graph this system of linear inequalities:

$\{(x, y) \mid 2x + y \leq 4, x \in \mathbb{W}, y \in \mathbb{W}\}$

$\{(x, y) \mid y \geq 2, x \in \mathbb{W}, y \in \mathbb{W}\}$

Would the solution region be shaded or ~~shaded~~ stippled?

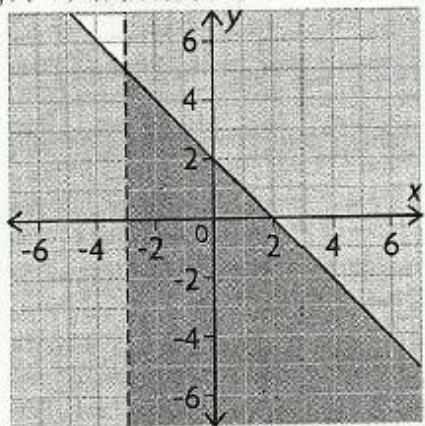
5. Graph the system of linear inequalities in question 4

ANSWERS:

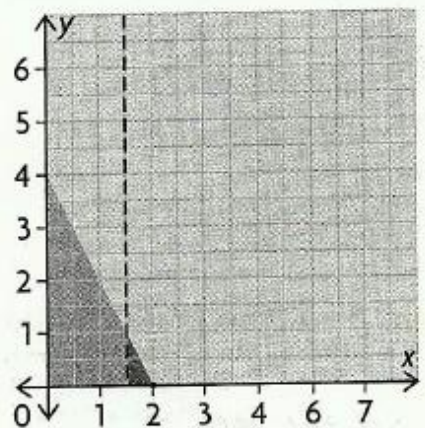
1. a) i) b) ii)

2. e.g., $(-2, 4)$, $(0, 2)$, $(1, 4)$

3. a)



b)



4. ~~shaded~~ stippled

5.

