Systems of Linear Inequalities in Two Variables

Total points = 23

2+1<4**√** ∴ YES **√**

B.1. $2-1 \le 1\sqrt{ }$

$$x-y \le 1 \checkmark \qquad x+y < 4 \checkmark$$

$$x \ge -y \checkmark \qquad 2x + y > 1 \checkmark$$

2.
$$-1 \ge -(1)\sqrt{}$$
 $2(-1)+1 > 1\sqrt{}$ $\therefore NO \sqrt{}$ $-1 > 1\sqrt{}$

$$x-2y \le 4\checkmark \qquad x+2y \ge 0\checkmark$$

$$2-2(-1) \le 4\sqrt{2+2(-1)} \ge 0\sqrt{2+2(-1)}$$
 : YES $\sqrt{2+2(-1)}$

Systems of Linear Inequalities in Two Variables

Total points = 23

$$x-y \le 1 \checkmark \qquad x+y < 4 \checkmark$$

B.1.
$$2-1 \le 1\sqrt{} 2+1 < 4\sqrt{} \therefore YES \checkmark$$

$$1 \le 1 \checkmark$$
 $3 < 4 \checkmark$

$$x \ge -y\checkmark$$
 $2x + y > 1\checkmark$

$$-1 \ge -(1)\checkmark \qquad 2(-1)+1 > 1\checkmark \qquad \therefore \text{NO } \checkmark$$
$$-1 \ge -1\checkmark \qquad \qquad -1 > 1\checkmark$$

$$x - 2y \le 4\checkmark \qquad \qquad x + 2y \ge 0\checkmark$$

3.
$$2-2(-1) \le 4\sqrt{} 2+2(-1) \ge 0\sqrt{} : YES \sqrt{}$$

Systems of Linear Inequalities in Two Variables

Total points = 23

$$x-y \le 1 \checkmark \qquad x+y < 4 \checkmark$$

B.1.
$$2-1 \le 1\sqrt{}$$
 $2+1 < 4\sqrt{}$ YES $\sqrt{}$

$$x \ge -y\sqrt{}$$
 $2x + y > 1\sqrt{}$

2.
$$-1 \ge -(1)\sqrt{}$$
 $2(-1)+1 > 1\sqrt{}$ \therefore NO $\sqrt{}$

$$-1 \ge -1\sqrt{}$$
 $-1 > 1\sqrt{}$

$$x - 2y \le 4\checkmark \qquad x + 2y \ge 0\checkmark$$

3.
$$2-2(-1) \le 4\sqrt{} 2+2(-1) \ge 0\sqrt{} :YES\sqrt{}$$

Systems of Linear Inequalities in Two Variables Total points = 23

$$x-y \le 1 \checkmark \qquad x+y < 4 \checkmark$$

B.1.
$$2-1 \le 1\sqrt{}$$
 $2+1 < 4\sqrt{}$ \therefore YES \checkmark

$$x \ge -y\sqrt{}$$
 $2x + y > 1\sqrt{}$

2.
$$-1 \ge -(1)\sqrt{}$$
 $2(-1)+1>1\sqrt{}$ $\therefore NO\sqrt{}$

$$-1 \ge -1 \checkmark$$
 $-1 > 1 \checkmark$

$$x-2y \le 4\sqrt{\qquad} \qquad x+2y \ge 0\sqrt{\qquad}$$

3.
$$2-2(-1) \le 4\sqrt{2+2(-1)} \ge 0\sqrt{2+2(-1)} \ge 0\sqrt{2+2(-1)}$$

4 ≤ 4√ o≥o√

Systems of Linear Inequalities in Two Variables

Total points = 23

$$x-y \le 1 \checkmark \qquad x+y < 4 \checkmark$$

B.1.
$$2-1 \le 1\sqrt{}$$
 $2+1 < 4\sqrt{}$ \therefore YES $\sqrt{}$

$$x \ge -y \checkmark$$
 $2x + y > 1 \checkmark$

$$-1 \ge -(1)\checkmark \qquad 2(-1)+1 > 1\checkmark \qquad \therefore NO \checkmark$$
$$-1 \ge -1\checkmark \qquad -1 > 1\checkmark$$

$$x-2y \le 4\sqrt{\qquad} \qquad x+2y \ge 0\sqrt{\qquad}$$

3.
$$2-2(-1) \le 4\sqrt{} 2+2(-1) \ge 0\sqrt{} : YES \sqrt{}$$

Systems of Linear Inequalities in Two Variables

Total points = 23

$$x-y \le 1 \checkmark \qquad x+y < 4 \checkmark$$

B.1.
$$2-1 \le 1\sqrt{} 2+1 < 4\sqrt{} \therefore YES \checkmark$$

$$x \ge -y\checkmark \qquad 2x + y > 1\checkmark$$

2.
$$-1 \ge -(1)\sqrt{2(-1)+1} > 1\sqrt{2(-1)+1} > 1\sqrt{$$

$$-1 \ge -1 \checkmark$$
 $-1 > 1 \checkmark$

$$x - 2y \le 4\checkmark \qquad \qquad x + 2y \ge 0\checkmark$$

3.
$$2-2(-1) \le 4\sqrt{2+2(-1)} \ge 0\sqrt{2+2(-1)}$$
 : YES $\sqrt{2+2(-1)}$

Systems of Linear Inequalities in Two Variables

Total points = 23

$$x-y \le 1 \checkmark \qquad x+y < 4 \checkmark$$

B.1.
$$2-1 \le 1\sqrt{}$$
 $2+1 < 4\sqrt{}$ \therefore YES \checkmark

$$x \ge -y \checkmark$$
 $2x + y > 1 \checkmark$

2.
$$-1 \ge -(1)$$
 $(-1)+1 > 1$ $\therefore NO$

$$-1 \ge -1 \checkmark \qquad -1 > 1 \checkmark$$

$$x - 2y \le 4\sqrt{\qquad} \qquad x + 2y \ge 0\sqrt{\qquad}$$

3.
$$2-2(-1) \le 4\sqrt{} 2+2(-1) \ge 0\sqrt{} \therefore YES \sqrt{}$$

 $4 \le 4\sqrt{} 0 \ge 0\sqrt{}$

Systems of Linear Inequalities in Two Variables Total points = 23

2. NO 🗸

$$x-y \le 1\sqrt{ } \qquad x+y < 4\sqrt{ }$$

B.1.
$$2-1 \le 1\sqrt{}$$
 $2+1 < 4\sqrt{}$ \therefore YES \checkmark

$$x \ge -y \checkmark \qquad 2x + y > 1 \checkmark$$

2.
$$-1 \ge -(1)\sqrt{}$$
 $2(-1)+1 > 1\sqrt{}$ $\therefore NO\sqrt{}$ $-1 \ge -1\sqrt{}$

$$x-2y \le 4\sqrt{\qquad} \qquad x+2y \ge 0\sqrt{\qquad}$$

3.
$$2-2(-1) \le 4\sqrt{} 2+2(-1) \ge 0\sqrt{} : YES \checkmark$$