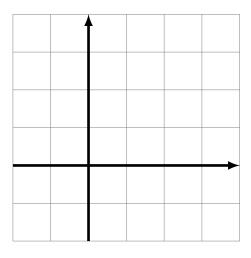
## Exception handling: unboundedness

Example. Maximize

$$z = x_1$$

subject to:

$$x_1 - x_2 \le 1 -x_1 + x_2 \le 2 x_1, x_2 \ge 0$$



<i>X</i> <sub>1</sub>	<i>x</i> <sub>2</sub>	<i>s</i> <sub>1</sub>	<b>s</b> <sub>2</sub>	
1	-1	1	0	1
-1	1	0	1	2
1	0	0	0	Z

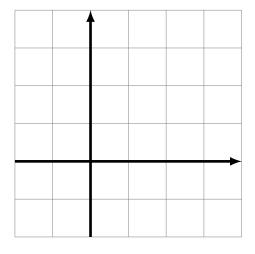
## Exception handling: degeneracy

## Example. Maximize

$$z = x_2$$

subject to:

$$-x_1 + x_2 \le 0$$
$$x_1 \le 2$$
$$x_1, x_2 \ge 0$$



<i>X</i> <sub>1</sub>	<i>x</i> <sub>2</sub>	<i>S</i> <sub>1</sub>	<i>s</i> <sub>2</sub>	
<u>-1</u>	1	1	0	0
1	0	0	1	2
0	1	0	0	Z