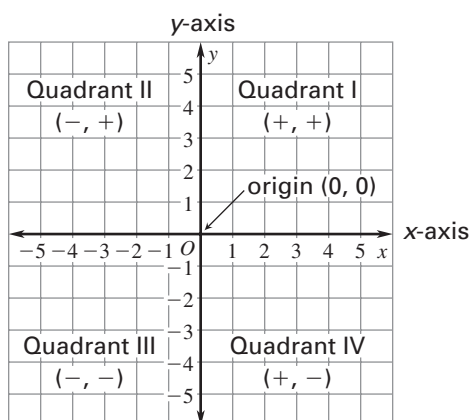




## Objective 6 TEKS 8.7.D Review

### 8.7.D Locate and name points on a coordinate plane using ordered pairs of rational numbers.

Each point on a coordinate plane is represented by an ordered pair  $(x, y)$ . The  $x$ -coordinate is located along the  $x$ -axis and the  $y$ -coordinate is located along the  $y$ -axis.

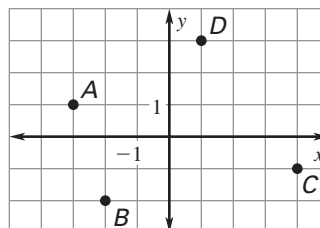


#### EXAMPLE

Which points on the coordinate grid satisfies the conditions  $x > -1$  and  $y < 3$ ?

Find the coordinates of each point. Check if the coordinates satisfy the conditions.

Coordinates	Conditions
$A(-3, 1)$	$x < -1, y < 3$
$B(-2, -2)$	$x < -1, y < 3$
$C(4, -1)$	$x > -1, y < 3$
$D(1, 3)$	$x > -1, y = 3$



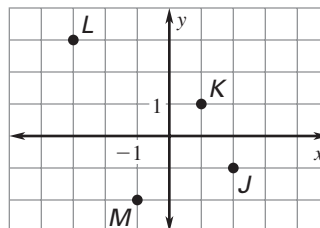
Because the  $x$ -coordinate in the ordered pair  $(4, -1)$  is greater than  $-1$ , and the  $y$ -coordinate is less than  $3$ , point  $C$  satisfies the conditions  $x > -1$  and  $y < 3$ .

#### YOU DO IT

Which points on the coordinate grid satisfy the conditions  $x < 2$  and  $y > 1$ ?

Find the coordinates of each point. Check if the coordinates satisfy the conditions.

Coordinates	Conditions
$J(2, -1)$	$x = 2, y < 1$
$K(1, 1)$	$x < 2, y = 1$
$L(-3, 3)$	$x < 2, y > 1$
$M(-1, -2)$	$x < 2, y < 1$



Point  $L$  satisfies the conditions  $x < 2$  and  $y > 1$  because the  $x$ -coordinate in the ordered pair  $(-3, 3)$  is less than 2, and the  $y$ -coordinate is greater than 1.