

## Regions on a Graph

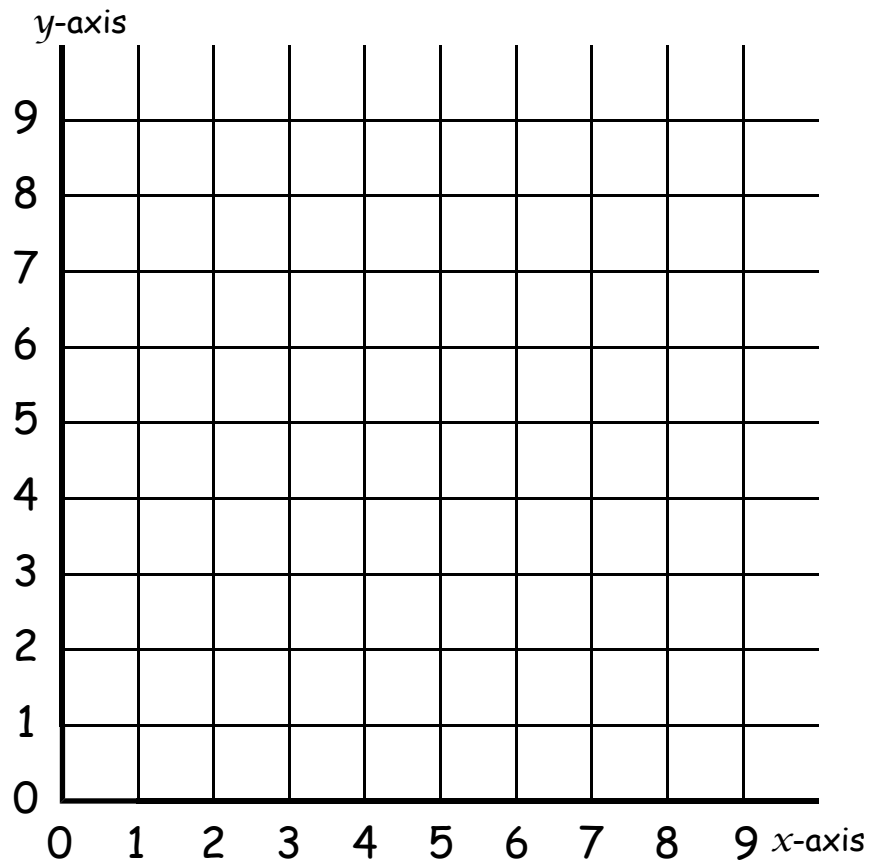
1. Shade in the region where:

$$x > 1$$

$$x < 8$$

$$y > 3$$

$$y < 7$$



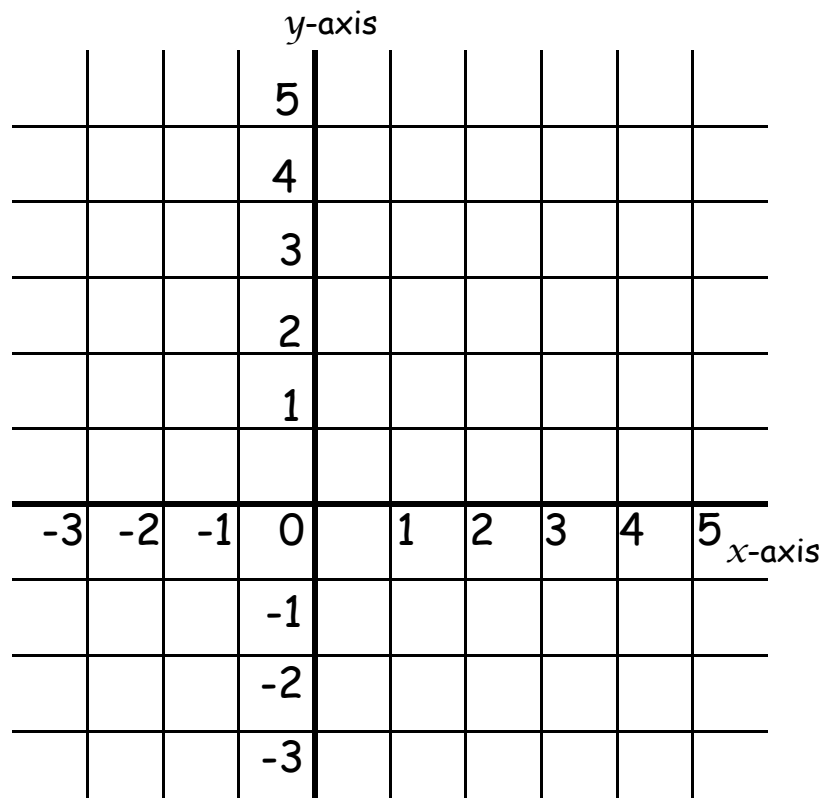
2. Shade in the region where:

$$x > -2$$

$$x < 4$$

$$y > -1$$

$$y < 3$$

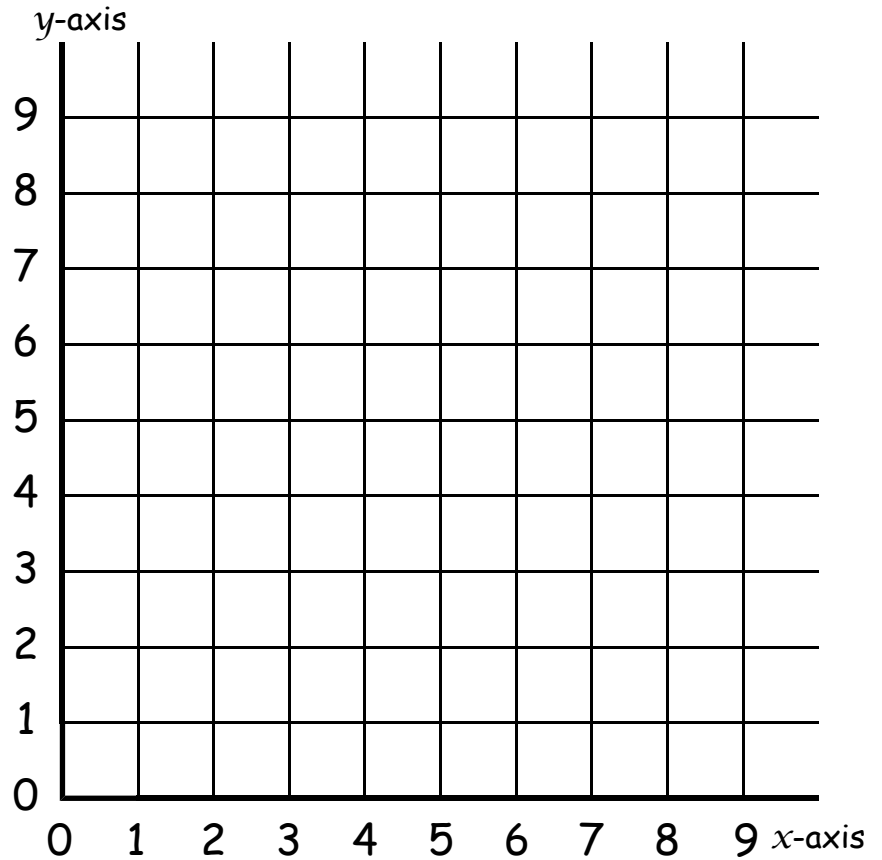


3. Shade in the region where:

$$x > 2$$

$$y > 3$$

$$x + y < 8$$

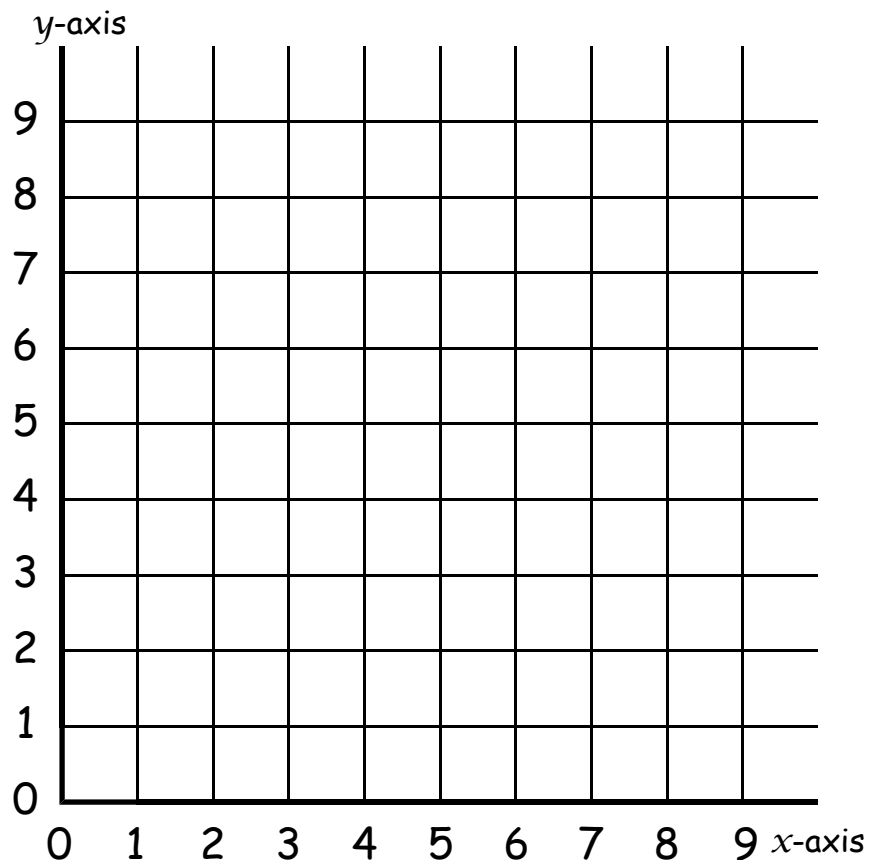


4. Shade in the region where:

$$x > 2$$

$$y > 1$$

$$x + y < 6$$

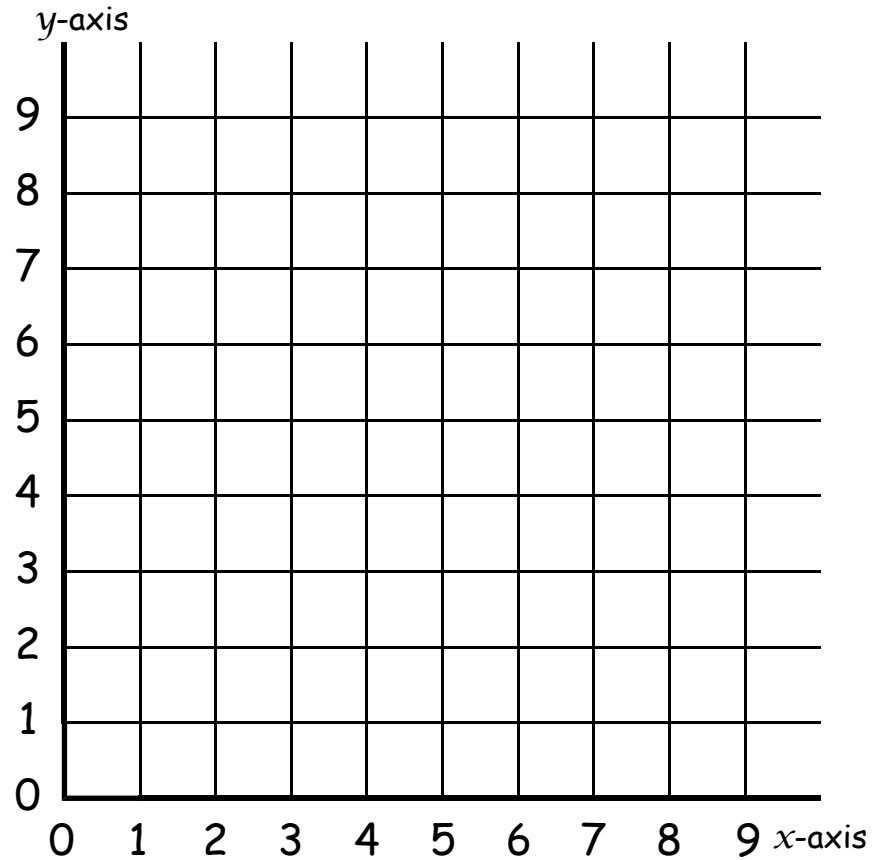


5. Shade in the region where:

$$x > 1$$

$$y > 3$$

$$2x + y < 8$$



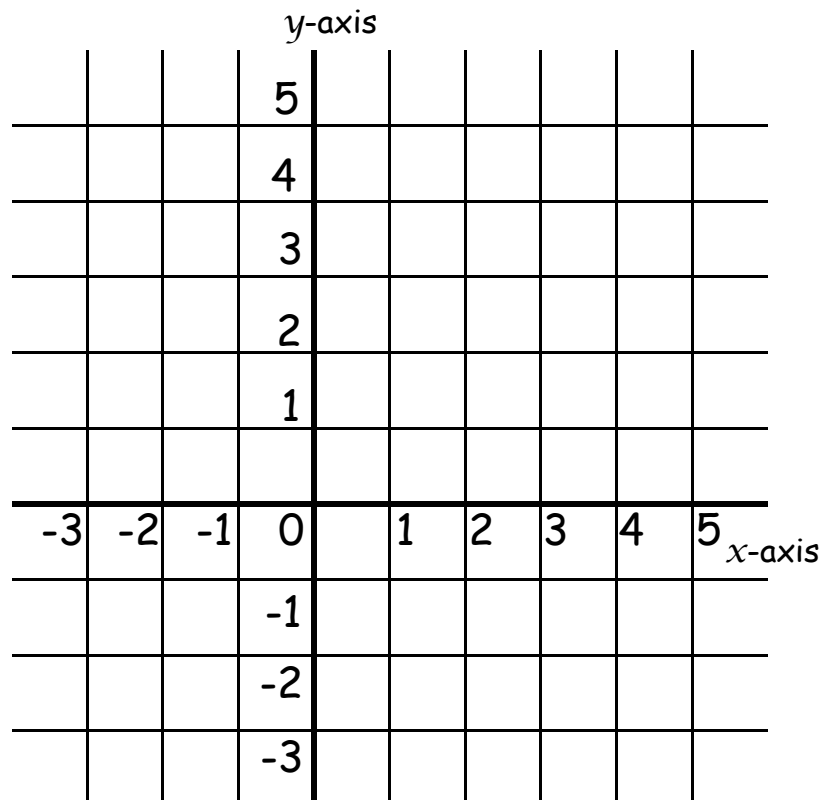
6. Shade in the region where:

$$x > -2$$

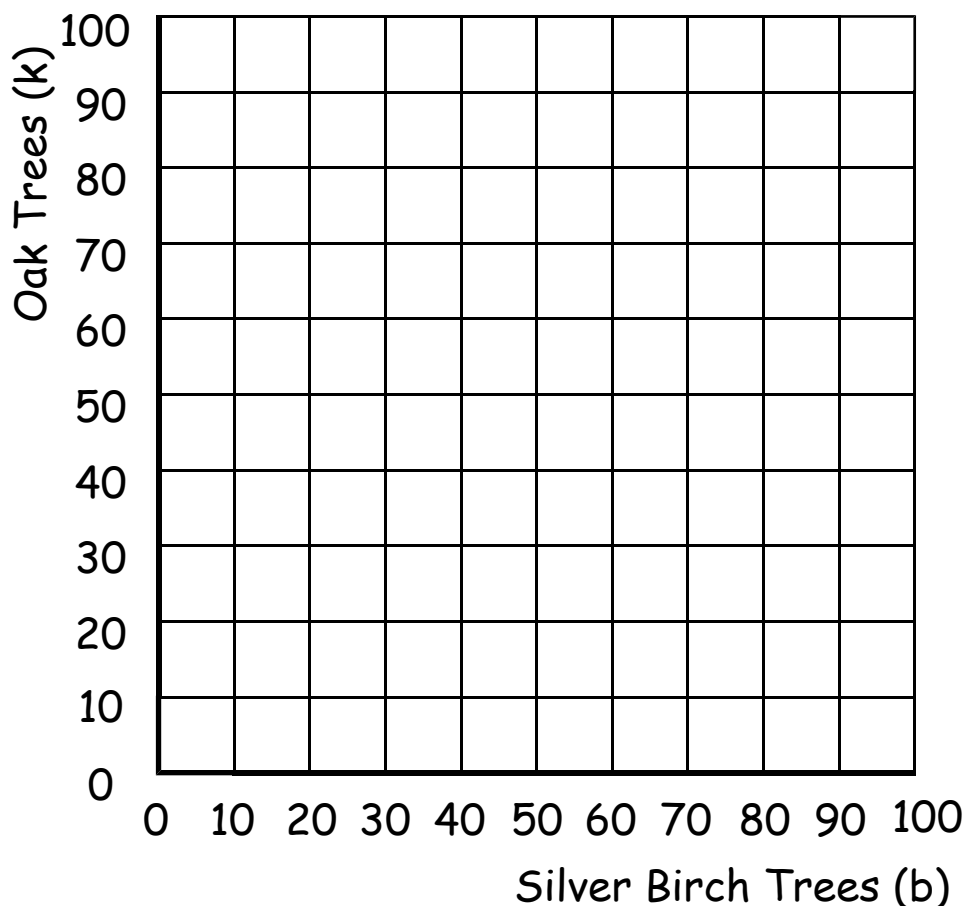
$$x < 4$$

$$y > -2$$

$$y - x < 3$$



7. An area of land is to be planted with silver birch and oak trees. In total, there must be at least 100 trees but there must be less oak than silver birch and no more than 70 silver birch trees. Shade on the graph a region that contains solutions for the numbers of each tree.



8. Another area of land is to be planted with ash and willow trees. In total, there must be at least 100 trees and there must be at least twice as many ash as willow but no more than 90 ash trees. Shade on the graph a region that contains solutions for the numbers of each tree.

