

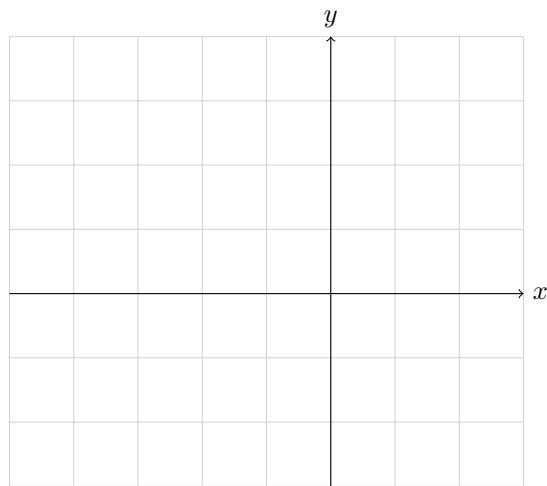
# PLOT LINES $\rightarrow$ FIND AREA

*Math 10 · Mr. Merrick · January 14, 2026*

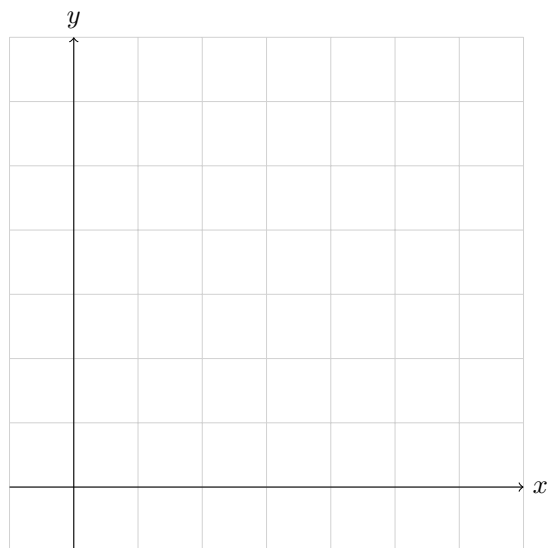
For each question:

- Plot all given lines on the Cartesian plane.
- Identify the enclosed region.
- Find the area. (Use horizontal bases and vertical heights.)

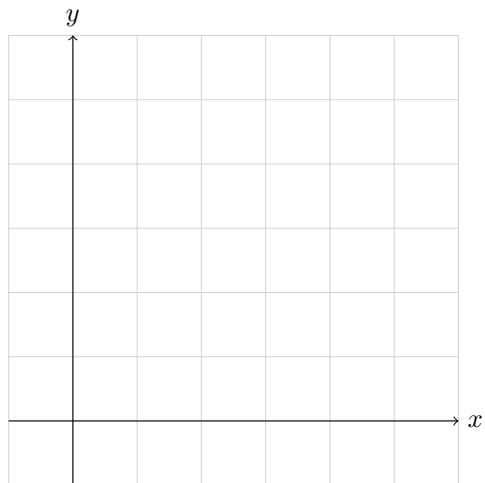
1. Plot  $y = 1$ ,  $y = x + 1$ , and  $y = -x - 1$ . Find the area of the region they enclose.



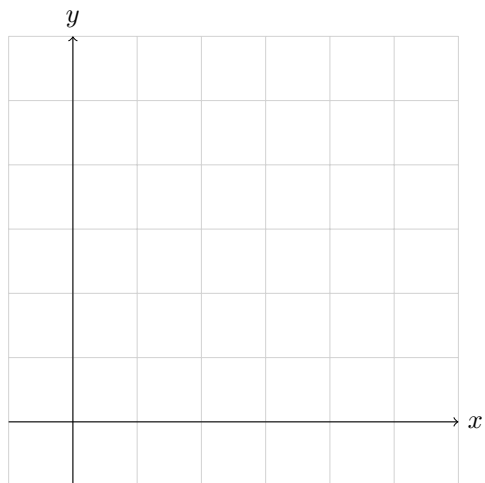
2. Plot  $x = 0$ ,  $y = 0$ , and  $y = -x + 5$ . Find the area of the region they enclose.



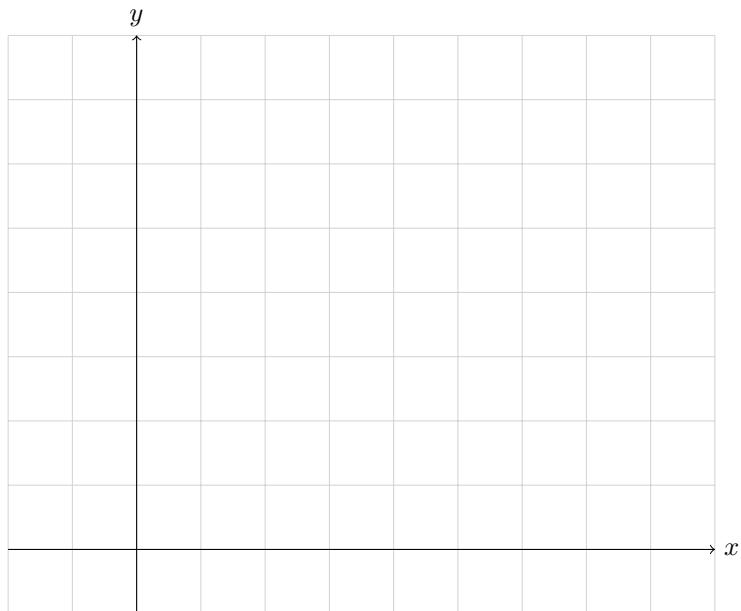
3. Plot  $x = 0$ ,  $y = 3$ , and  $y = x + 1$ . Find the area of the region they enclose.



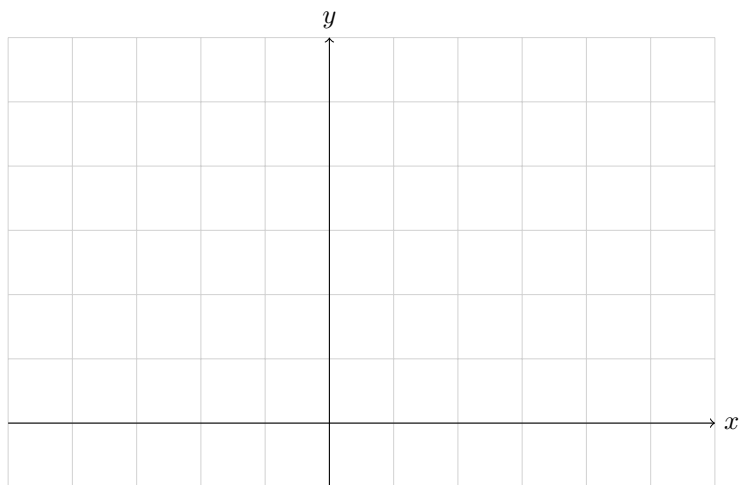
4. Plot  $x = 0$ ,  $y = 0$ ,  $y = 4$ , and  $y = 2x$ . Find the area of the region they enclose.



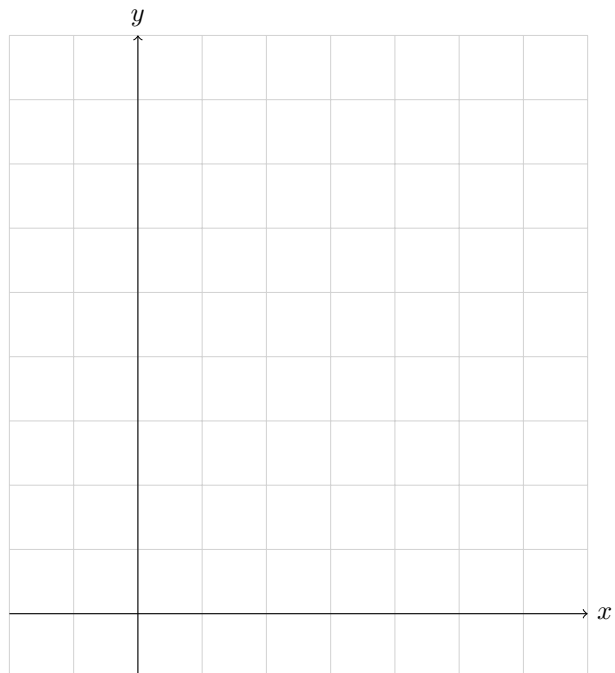
5. Plot  $y = 1$ ,  $y = 5$ ,  $y = x + 1$ , and  $y = -x + 7$ . Find the area of the region they enclose.



6. Plot  $y = 0$ ,  $y = 3$ ,  $y = x$ , and  $y = x + 2$ . Find the area of the region they enclose.



7. Plot  $y = 2$ ,  $y = 6$ ,  $y = 2x$ , and  $y = -2x + 8$ . Find the area of the region they enclose.



8. Plot  $y = 1$ ,  $y = 4$ ,  $x = -1$ , and  $y = -x + 3$ . Find the area of the region they enclose.

