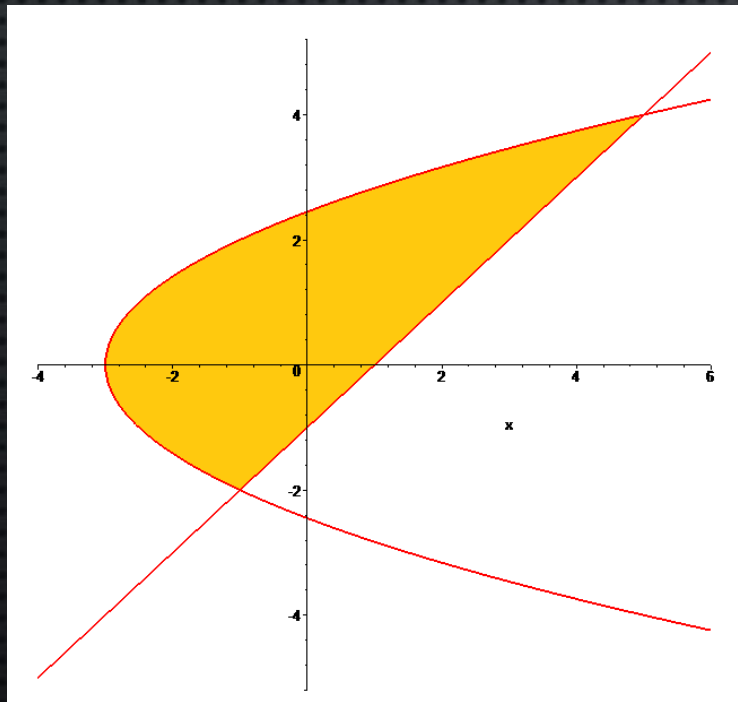


EXAMPLE

Consider the region bounded by $y = x - 1$ and $y^2 = 2x + 6$. See the diagram.



- Determine (algebraically) the points of intersection.
- Set up an integral that calculates the bounded area by using the “top curve” minus “bottom curve” paradigm. Why is this difficult? **Do not evaluate this integral.**
- Set up and evaluate an easier integral that will compute the same area as part (b).