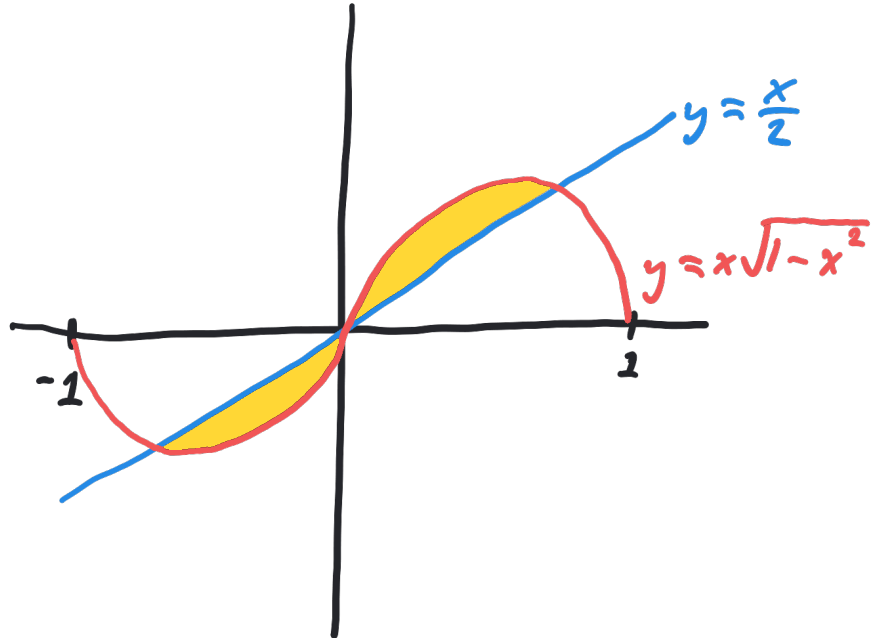


Problem 1. Find the area of the shaded region in this figure:



Problem 2. Find the area bounded by the curves $y = e^x$, $y = 12 - e^x$, and the y-axis.