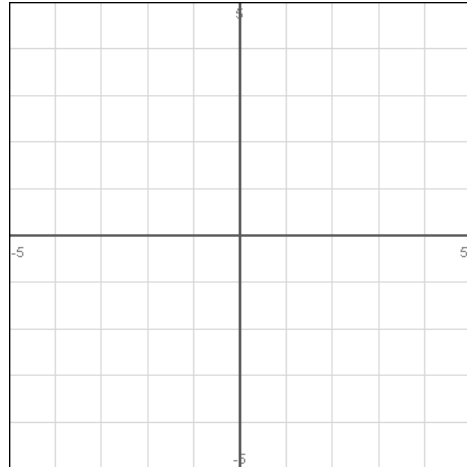


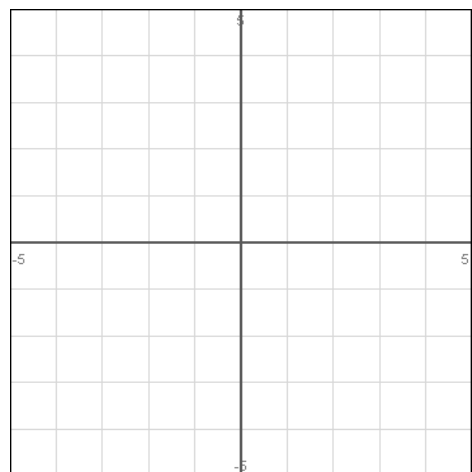
## Areas of Regions Between Curves

$$\text{Area} = \int_a^b f_1(x) - f_2(x) dx$$

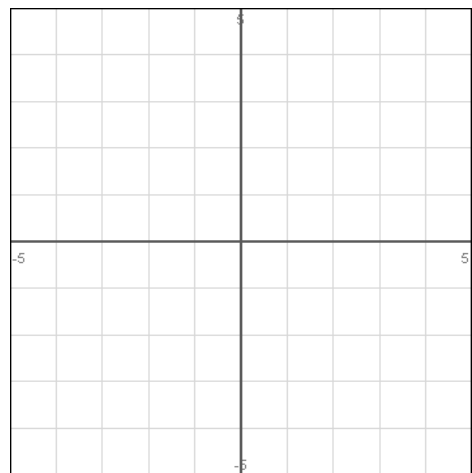
1. Find the area between the curves  $y = 2 - x^2$  and  $y = -x$ .



2. Find the area between the curves  $y = 4 - x^2$  and  $y = -x + 2$  between  $x = -2$  and  $x = 3$ .



3. Find the area between the curves  $y = \sqrt{x}$ , the  $x$ -axis and  $y = x - 2$  in Quadrant I.



4. Find the area between the curves  $f(y) = y(2 - y)$  and  $g(y) = -y$ .

