

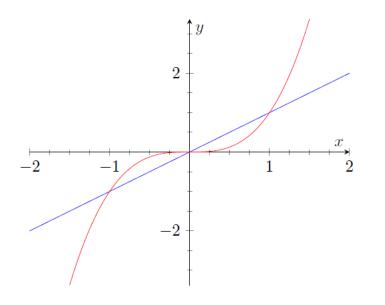
Finding the Area of Compound Regions

Learning Objectives

- Find the area of a region bounded by two regions that cross
- Find the area of a region bounded above by two different functions

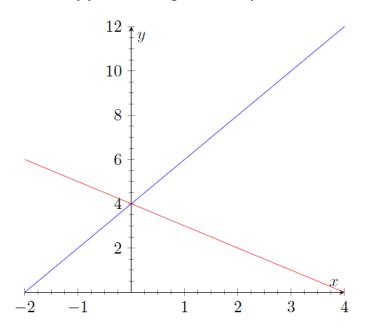
Find the area of a region bounded by two regions that cross

1. Find the area of the region bounded by f(x) = x and $g(x) = x^3$.



Find the area of a region bounded above by two different functions

2. Find the area bounded by the functions f(x) = 2x + 4, g(x) = -x + 4 and the x-axis. Verify your answer geometrically.



ANSWER KEY

1. $\frac{1}{2}$ 2. 12