

Math 3B — Week 2

Areas between curves Compute the areas of the regions bounded by

(a) $y = x$ and $y = x^2$.

(d) $f(x) = x(x + 3)(x - 3)$ and $g(x) = 0$.

(b) $y = 2x^2 + 10$, $y = 4x + 16$, $x = -2$, and
 $x = 5$.

(e) $f(x) = x$, $g(x) = 2x$, and $h(x) = 5 - x$.

(c) $y = x$, $y = \sin(x)$, $x = 0$, and $x = \pi$.

(f) $f(y) = \frac{1}{2}y^2 - 3$ and $g(x) = x - 1$.

