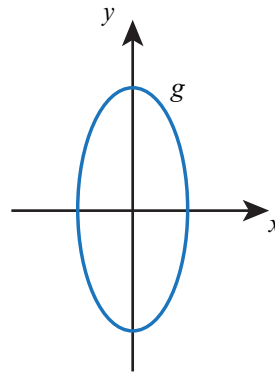
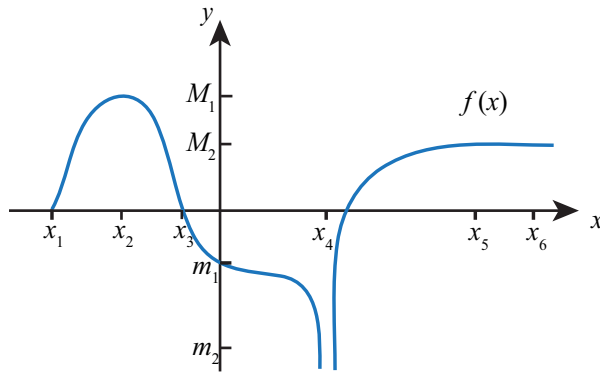


Functions Worksheet - Answer Key



- Find the interval(s) on which $f(x)$ is strictly increasing.
(x_1, x_2), (x_4, x_5)
- Find the interval(s) on which $f(x)$ is constant.
(x_5, x_6)
- Find the interval(s) on which $f(x)$ is decreasing.
(x_2, x_4)
- Find the upper and lower bounds of $f(x)$ on the interval $(0, x_6)$.
Upper= M_2 , lower= $-\infty$
- Is $f(x)$ odd on the interval (x_1, x_3) ?
No, $f(x)$ is even on (x_1, x_3) .
- Find the upper bound and lower bound

of $f(x)$ for $x < 0$.

Upper = M_1 , lower = m_1

- Is g a function of y or x ? Give reasons for your answer.
 g is a function of y , since it fails the vertical test and passes the horizontal line test.
- Determine if the function $h(x) = \frac{x^2+1}{x^3}$ is odd or even.
Odd.
- Find the bounds of the function $v(x) = 7 - e^{-x}$.
Upper = 7, lower = $-\infty$
- Is y defined as $y^2 + y = x$ a function of x ?
No.