

MHF4U: Oblique Asymptotes

For each function, determine the equation of the oblique asymptote and sketch a graph of the function. Clearly indicate all intercepts and discontinuities in each function.

1. $f(x) = \frac{x^2 - 4}{x + 1}$

2. $g(x) = \frac{x^2 - 3x + 2}{x - 3}$

3. $h(x) = \frac{x^3 - 7x + 6}{x^2 + x - 2}$

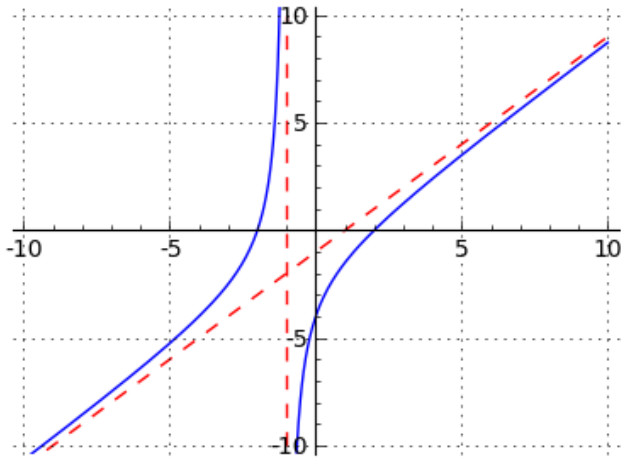
4. $f(x) = \frac{-x^3 + 3x^2 - 2x}{x^2 - x - 2}$

5. $g(x) = \frac{x^3 - x^2 - 4x + 4}{x^2 - 2x - 3}$

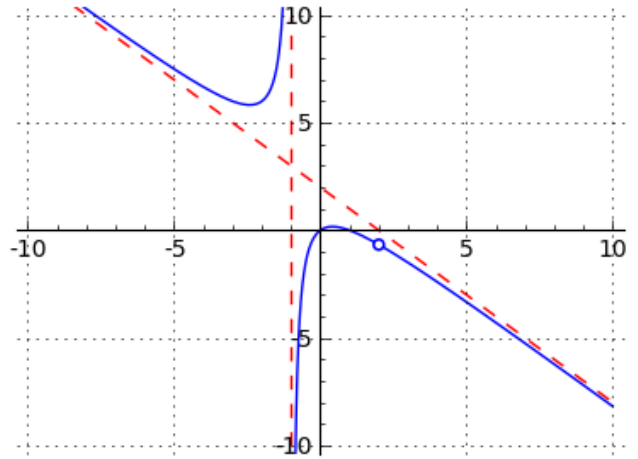
6. $h(x) = \frac{x - x^3}{x^2 - x - 6}$

Solutions to MHF4U: Oblique Asymptotes

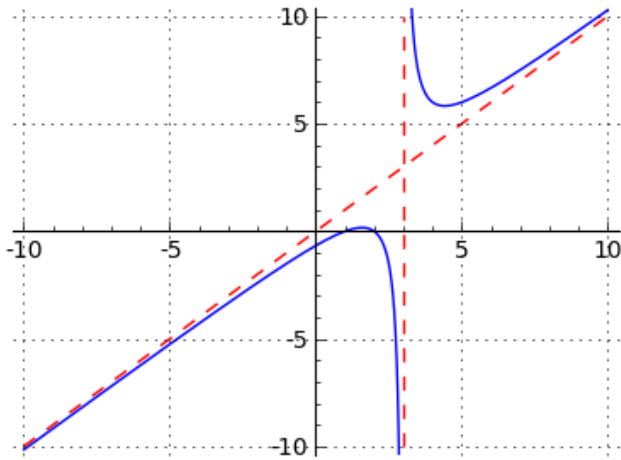
1. $y = x - 1$



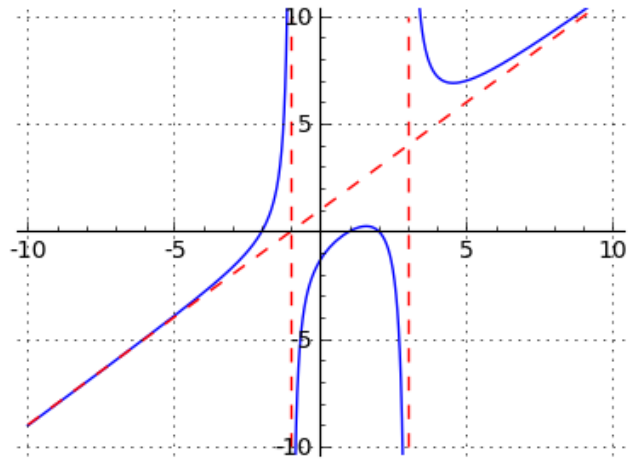
4. $y = -x + 2$



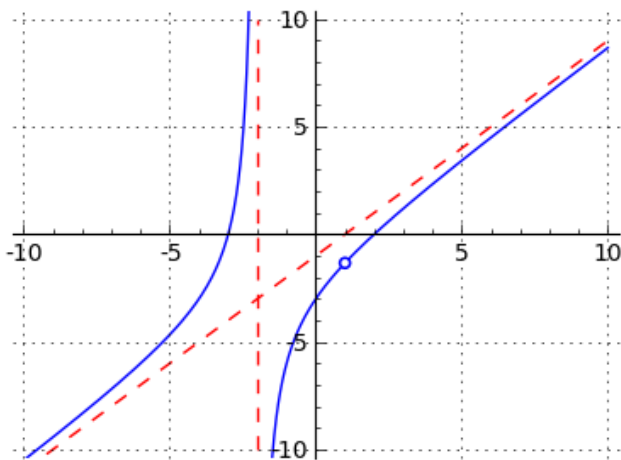
2. $y = x$



5. $y = x + 1$



3. $y = x - 1$



6. $y = -x - 1$

