Problem 3
Consider the three maps on the interval \([0, 1]\)

\[ f_A(x) = 3x^2 - 2x^3, \quad f_B(x) = 1 - x^2, \quad f_C(x) = (1 - x)/(2 - x). \]

a) Sketch each map in a diagram. What can you say about the \(\omega\)-limit sets of each map.

b) Compute the \(\omega\)-limit sets of each map.

Problem 4*
Let \( f : [0, 1] \to [0, 1] \) be a continuous invertible map on the interval \([0, 1]\). Is there anything you can say about the \(\omega\)-limit set of orbits? Do your conclusions hold as well for discontinuous invertible maps on \([0, 1]\)? Do your conclusions hold for continuous invertible maps on the open interval \((0, 1)\)?