# 1.

To find the vertical asymptote :
We must set the denominator equal to 0 and solve:
$m^4 - 1 = 0$
$(m^2 - 1)(m^2 + 1) = 0$
$(m^2 - 1) = 0$
$(m - 1)(m + 1) = 0$
$m = 1$ or $m = -1$
There is vertical asymptote at $m = 1$ and at $m = -1$
To find the horizontal asymptote :
First we must compare the degrees of the polynomials.
The numerator contains a $3^{rd}$ degree polynomial while the
denominator contains a $4^{th}$ degree polynomial.
Since the polynomial in the numerator is a lower degree than the denominator,
the horizontal asymptote is located at $b = 0$.
To find the oblique asymptote :
Since the degrees of the numerator are less than the degrees of the denominator,
this rational does not have an oblique asymptote