5.

It so happens that this function can be simplified as:

$$m(p) = \frac{-3 - 10\,p + 25\,p^2}{1 + 5\,p}$$

$$= \frac{(5\,p - 3)\,(5\,p + 1)}{5\,p + 1}$$

$$= 5\,p - 3$$

To find the vertical asymptote :

There is no vertical asymptote

To find the horizontal asymptote :

First we must compare the degrees of the polynomials.

The numerator contains a 2nd degree polynomial while the denominator contains a 1st degree polynomial.

Since the polynomial in the numerator is a higher degree than the denominator, there is no horizontal asymptote.

To find the oblique asymptote :

we must divide the numerator by the denominator and so the oblique asymptote $n = 5\,p - 3$