2.

It so happens that this function can be simplified as:

$$h(a) = \frac{-15-2a+a^2}{3+a}$$

$$= \frac{(a-5)(a+3)}{a+3}$$

$$= a - 5$$

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 2^{nd} degree polynomial while the denominator contains a 1^{st} 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 $n = a - 5$