2.

It so happens that this function can be simplified as:

$$s(g) = \frac{-3+2g+8g^2}{3+4g}$$

$$= \frac{(2g-1)(4g+3)}{4g+3}$$

$$= 2g - 1$$

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 $j = 2g - 1$