It so happens that this function can be simplified as:

 $S(h) = \frac{-1+h^3}{-5+4h+h^2}$

$$=\frac{(h-1) \ (h^2+h+1)}{(h-1) \ (h+5)}$$

$$=\frac{h^2+h+1}{h+5}$$
 To find the vertical asymptote :
$$h+5=0$$

h = -5There is a vertical asymptote at h=-5To find the horizontal asymptote :

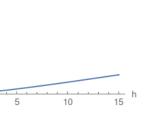
First we must compare the degrees of the polynomials. The numerator contains a 3rd degree polynomial while the

denominator contains a 2nd 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 :

-20

-10



we must divide the numerator by the denominator $\frac{-1+h^3}{-5+dh+h^2} = \frac{h^2+h+1}{h+5} = \frac{21}{h+5} + (h-4)$ There is an oblique asymptote at g=h - 4