It so happens that this function can be simplified as: $t(a) = \frac{-1+a^3}{-1+a^2}$

 $= \frac{(a-1) \left(a^2 + a + 1\right)}{(a-1) (a+1)}$ $a^{2}+a+1$

To find the vertical asymptote :
$$a+1=0$$
 $a=-1$

-15

There is a vertical asymptote at a=-1To find the horizontal asymptote :

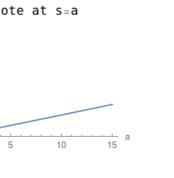
First we must compare the degrees of the polynomials. The numerator contains a 3rd degree polynomial while the

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 : we must divide the numerator by the denominator $\frac{-1+a^3}{-1+a^2} = \frac{a^2+a+1}{a+1} = \frac{1}{a+1} + a$

There is an oblique asymptote at s=a -105 10



$$\frac{1+a^3}{1+a^2} = \frac{a^2+a+1}{a+1} = \frac{1}{a+1} + a$$