To find the vertical asymptote : We must set the denominator equal to 0 and solve: $a^4 - 81 = 0$

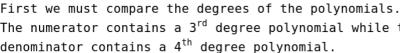
$$(a^2-9)=0$$

 $(a-3)(a+3)=0$
 $a=3 \text{ or } a=-3$

 $(a^2-9)(a^2+9)=0$

There is vertical asymptote at a=3 and at a=-3

-15



The numerator contains a 3rd degree polynomial while the

denominator contains a 4th degree polynomial. Since the polynomial in the numerator is a lower degree than the denominator,

the horizontal asymptote is located at q=0.

To find the oblique asymptote : this rational does not have an oblique asymptote

5 -10

