

$$21) f(x) = \frac{x-1}{x^3-4x}$$

- Zero of the polynomial

$$x-1=0; \boxed{x=1}$$

- Vertical Asymptote

$$x^3-4x=0; x(x^2-4)=0; x(x+2)(x-2)=0$$

Vertical Asymptote on $\boxed{x=0, -2, 2}$

- Horizontal Asymptote

Since numerator degree is $<$ than denominator degree
then Horizontal Asymptote is on $\boxed{y=0}$

