27. $f(x) = \dfrac{x^2 - 1}{x^2 - 4} = \dfrac{(x-1)(x+1)}{(x-2)(x+2)}$

$f = 0$ at $x = \pm 1$.

f is not defined at $x = \pm 2$.

$f(x) > 0$ on $(-\infty, -2)$, $(-1, 1)$, and $(2, \infty)$.

$f(x) < 0$ on $(-2, -1)$ and $(1, 2)$.