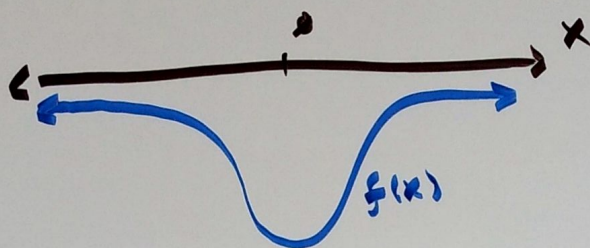


$\frac{3}{d}$

$$f(x) = \sqrt{x^2 + 1} - \sqrt{x^2 + 4}$$



CANCELLATION OCCURS @
LARGE POSITIVE &
NEGATIVE x

FIRST WRITE $f(x)^2$

AS

$$f(x)^2 = x^2 + 1 - 2\sqrt{(x^2 + 1)(x^2 + 4)} + x^2 + 4$$

$$= 2x^2 + 5 - 2\sqrt{x^4 + 5x^2 + 4}$$

NOW COMPUTE IN



THIS FORM

THEN COMPUTE THE SQUARE ROOT OF
THAT VALUE