$\frac{2}{6}$

$$g(x) = \frac{2}{3}x_n + \frac{1}{x_n^2}$$

LATION

$$\alpha = 3^{1/3}$$

$\rightarrow$ $\alpha \cdot 10 =$ ~~10.3~~

$$= 10 \cdot 3^{1/3}$$

$$= 30^{1/3} = 14$$

$$g(14) = \frac{2}{3}(14) + \frac{1}{(14)^2}$$

$$= 9.3$$

$g(x) \neq x$ FOR ALL x W/IN 1 ORDER OF MAG OF α

SO, $g(x)$ DOES NOT MAP $[a, b]$ ON $[a, b]$ FOR ALL x NEAR α