

(3.2-1)

$$f(a) \leq f(b)$$

$$g(a) \leq g(b)$$

f is nonnegative
 g is nonnegative

Prove $f(a) \cdot g(a) \leq f(b) \cdot g(b)$

$$f(a) \cdot g(a) \leq f(b) \cdot g(b)$$

$$f(a) \cdot g(a) \leq f(b) \cdot g(b)$$

$$f(a) \cdot g(a) \leq f(b) \cdot g(b)$$

divide by $f(a)$ } $g(a) \leq g(b)$

$f(a) \leq f(b)$ } divide by $g(a)$

by $g(a) \leq g(b)$ } = TRUE

= TRUE } by $f(a) \leq f(b)$

= TRUE By Introduction

(2.3-1)

