

WED 2-15-06

R.B.F.

⑥ B ⑦ E ⑧ D

⑨ C ⑩ D ⑪ B

→ TOTAL DIST
TRAVELED

P. 257 ②⑥ THE AREA OF THE REGION IS
THE TOTAL NUMBER OF UNITS SOLD, IN MILLIONS,
OVER THE 10-YEAR PERIOD.

P. 295 ⑧ a) 26,360,000 $f+^3$

b) 988.5 → 988 LICENSES

P. 275 ②⑧ AVG. VALUE = 1

2 POINTS: (0,1); (2,1)

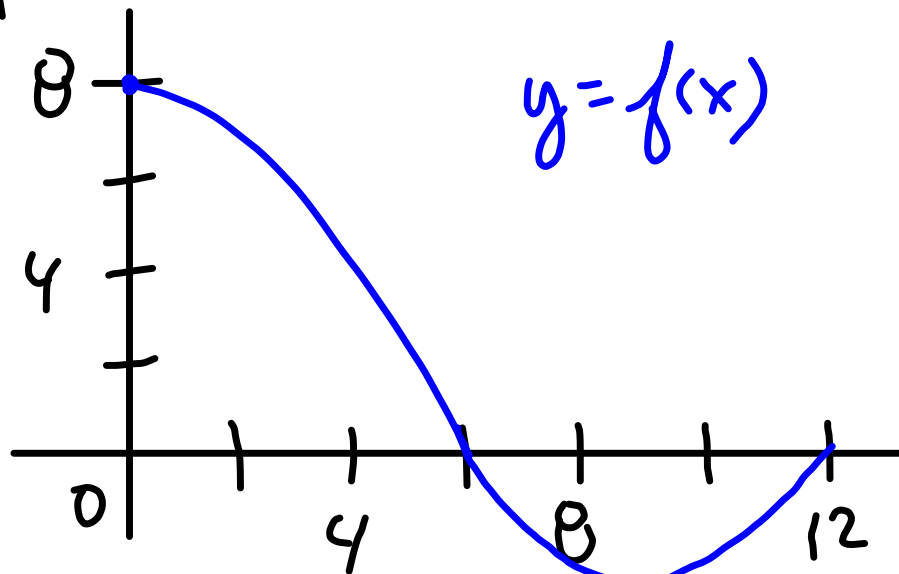
HUGE DEAL:

$$\int_a^b y(x) dx = f(b) - f(a)$$

$f(x)$

"DUMMY VARIABLE"

P.287 (53) 'AP'

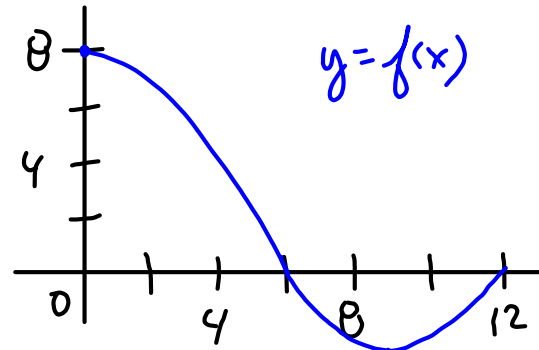


a) $H(0) = ?$

$$H(0) = \int_0^0 f(x) dx$$
$$= \underline{\underline{0}}$$

$$H(x) = \int_0^x f(x) dx$$

b) ON WHAT
INTERVAL IS H
INCREASING?
EXPLAIN.



$$H(x) = \int_0^x f(t) dt$$

WHEN $H'(x)$ IS POS.

$$H'(x) = \frac{d}{dx} \int_0^x f(t) dt = \underline{\underline{f(x)}}$$

SO WHEN IS $f(x)$ POS?

$$0 \leq x < 6$$

$$[0, 6)$$

c) H CONCAVE UP?

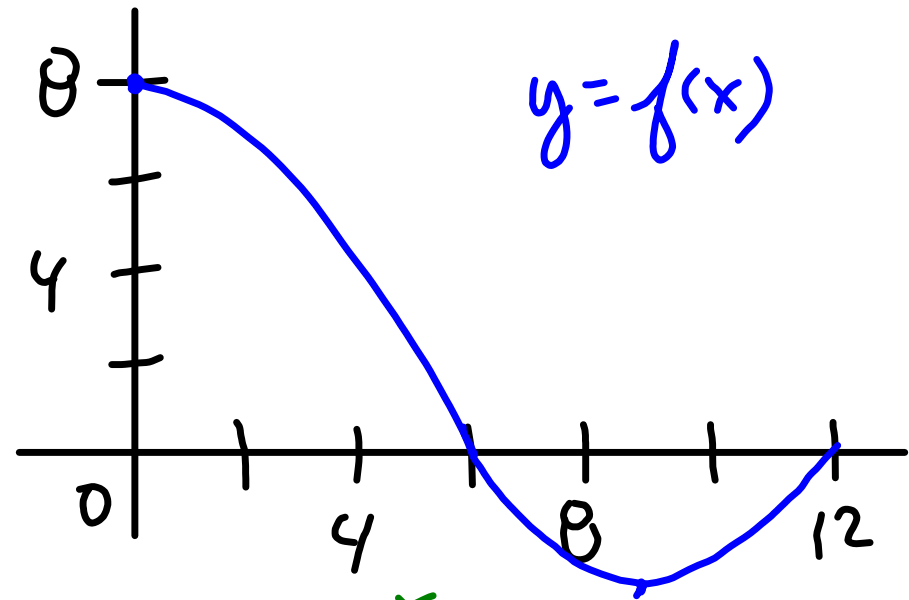
EXPLAIN

$H''(x)$ is POS

$$H'(x) = f(x)$$

$$H''(x) = f'(x)$$

$$H''(x) \approx f'(x)$$



$$H(x) = \int_0^x f(t) dt$$

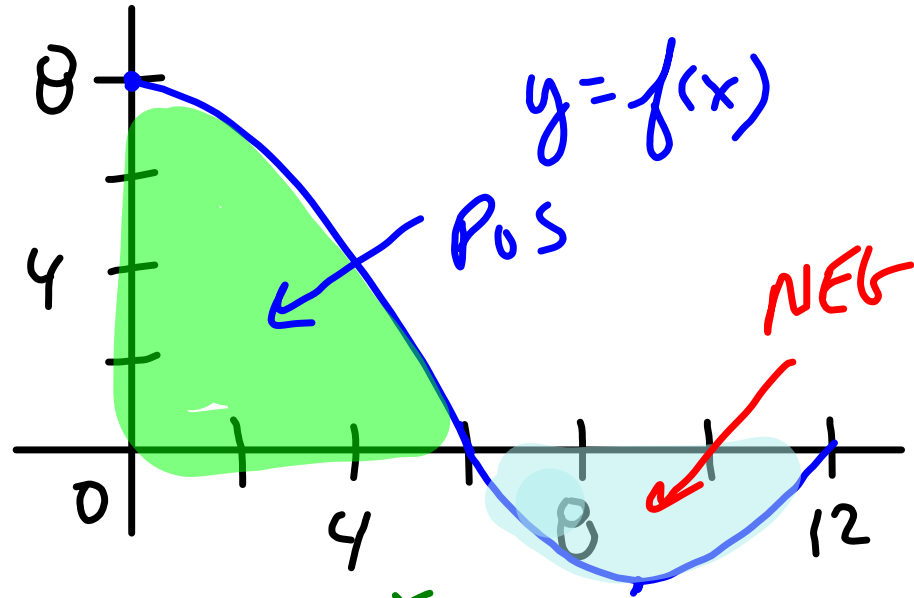
- +

9

$9 < x \leq 12$

↓ IS $H(12)$
POS OR NEG?

EXPLAIN



$$H(12) = \int_0^{12} f(x) dx$$

POS

$$H(x) = \int_0^x f(x) dx$$

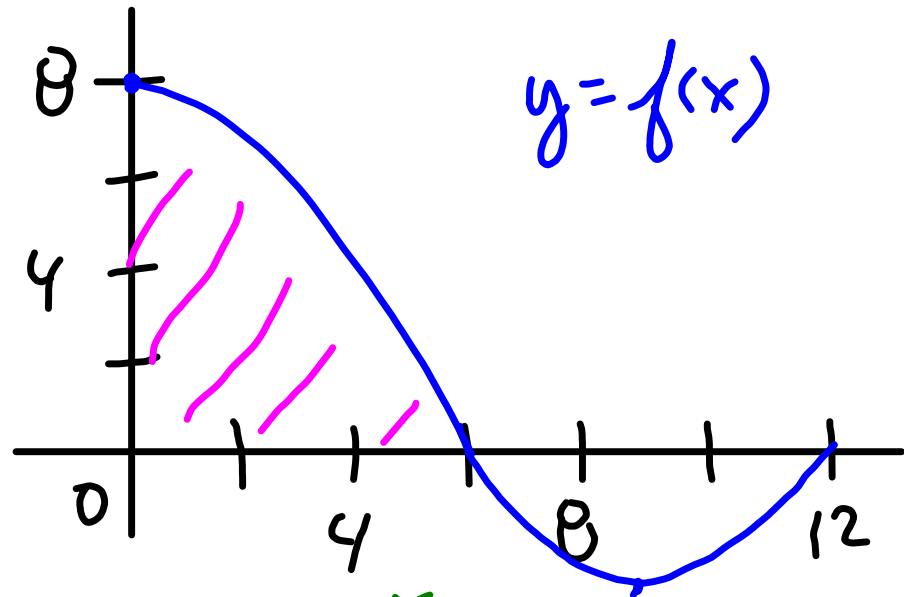
e) MAX VALUE
WHERE?

AT $x=6$.

$$H(6) = \int_0^6 f(x) dx$$

f) MIN VALUE WHERE?

$$H(0) = \int_0^0 f(x) dx = \underline{\underline{0}} \text{ (SMALLEST AREA)}$$



$$H(x) = \int_0^x f(t) dt$$

O.T.L. · CORRECT TODAY'S; BRING?

· READ THE BOTTOM HALF OF
P. 278 SEVERAL TIMES

P. 275 4, 2

P. 287-8 47, 48, 54

P. 300 51

P. 268 44

MOST ARE
'AP' TYPE
PROBLEMS

TEST TUESDAY: CHAP. 5