

December 5, 2025

National Sachertorte Day

Today in History:

California Gold Rush Starts (1848)

Prohibition Ends (1933)

Number of the Day: 436

436 = $2 \times 2 \times 109$

436 is the smallest number whose cube (82881856) contains four 8s.

Fun Fact:

Pentheraphobia is a fear of a mother-in-law.

Quote of the Day:

"In crucial things, unity. In important things, diversity. In all things, generosity."

- George H. W. Bush

Today's Weather:

Sun and clouds mixed. High 29°.

Math 121 - Quiz #50

Pick up Blue Book.

MATH 121 FINAL

FALL 2025

20 - 10 POINT QUESTIONS - 200 POINTS

- | | | | |
|----------------|----------------------|----------------------|--------------------|
| 1) PRE-CALC | 6) IMPLICIT DIFF. | 11) GRAPHING | 16) AREA AVE VALUE |
| 2) PRE-CALC | 7) RELATED RATES | 12) INTEGRALS (2) | 17) VOLUME SLICE |
| 3) DERIVATIVES | 8) APPLIED MAX/MIN | 13) INTEGRALS (2) | 18) VOLUME SHELLS |
| 4) DERIVATIVES | 9) L'HOSPITAL'S RULE | 14) FTC I & II (2) | 19) WORK |
| 5) DERIVATIVES | 10) NUMERICAL STUFF | 15) SUBSTITUTION (2) | 20) T/F |

PRE-CALC

INEQ
ABS. VALUE
TRIG
LOGS
EXPONENTIALS

GRAPHING

DOM
RANGE
X-INT
Y-INT
INC/DEC/C.P
CON UP/CON DN/IP
V.A./H.A.

DERIVATIVES

DEF.
SUM/POWER
PROD/QUOT.
CHAIN
FUNCT.
TRIG
 e^x
 $\ln x$
INV TRIG
HYPER.
IMPLICIT.

L'HOSPITAL'S RULE
" $\frac{0}{0}$ " " $\frac{\infty}{\infty}$ " " $\infty - \infty$ "
" $0 \cdot \infty$ " " $\frac{\infty}{1}$ "

NUMERICAL STUFF

NEWTON'S METHOD
MVT / ROLLÉ'S THM
LINEAR APPROX

INTEGRALS

DEF.
INDEF.