

# INTERSECTION SPHERE-CYLINDRE. HP48GX.

543 bytes.

## ISCY.

<<CLEAR SOUP PROS

"Inter.sphère-cylindre"

D S ? " { " " } INPUT STR → 'X' STO

"D ?" { " " } INPUT STR → 'Y' STO

"H ?" { " " } INPUT STR → 'Z' STO

"E ?" { " " } INPUT STR → 'r' STO

'X/2' → NUM 'X' STO

'Y/2' → NUM 'Y' STO

DO CLEAR PROJ

"A° ?" { " " } INPUT STR → 'θ' STO

"Ld = RA r"

'θ' → NUM 'V' STO PROM

'Y \* V' → NUM PROK

"H = HT - Z"

"H = HT - V (RS² - R² + ZRE" "sin A° - E²)"

'Z - V (X² - Y² + 2 \* Y \* r \* sin(θ) - r²)'

→ NUM PROK

UNTIL θ 360 > END

PROGR TRAC >>