
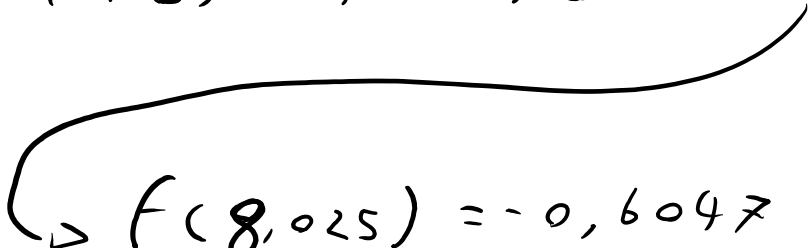


$$V(h) = \pi h^2 \left(5 - \frac{h}{3}\right) = 471 \quad [h \in (0, 2R) = (0, 10)]$$


$$f(h) = -\frac{1}{3}\pi h^3 + 5\pi h^2 - 471 = 0$$

$$f(8.0) = -1,8555 < 0$$

$$f(8.05) = +0,6341 > 0$$

$$\rightarrow \boxed{8.00 - 8.05}$$


$$\rightarrow f(8.025) = -0,6047 < 0$$

$$f(8.0375) = +0,01615 > 0$$

$$f(8.03125) = -0,2940 < 0$$

$$f(8.03711) = -0,90321 < 0$$

$$\downarrow$$
$$\sim \text{8,037} \quad (\text{error} \leq 10^{-3})$$