

# LAB 1 PARTICIPATION ACTIVITY

TANK	1	2	3	4	5
RADIUS (m)	3.3	2.9	3.5	3.6	2.7
HEIGHT (m)	5.1	4.7	6.4	6.1	4.9
VOLUME (m <sup>3</sup> )	170	120	250	250	110
S AREA (m <sup>2</sup> )	170	140	220	220	130

$$(V_{\text{tank}})_1 = \pi \cdot (3.3 \text{ m})^2 \cdot 5.1 \text{ m} = 174.4809143877 \text{ m}^3$$

$$(V_{\text{tank}})_2 = \pi \cdot (2.9 \text{ m})^2 \cdot 4.7 \text{ m} = 124.1777328184 \text{ m}^3$$

$$(V_{\text{tank}})_3 = \pi \cdot (3.5 \text{ m})^2 \cdot 6.4 \text{ m} = 246.3008640414 \text{ m}^3$$

$$(V_{\text{tank}})_4 = \pi \cdot (3.6 \text{ m})^2 \cdot 6.1 \text{ m} = 248.3617488222 \text{ m}^3$$

$$(V_{\text{tank}})_5 = \pi \cdot (2.7 \text{ m})^2 \cdot 4.9 \text{ m} = 112.2208311789 \text{ m}^3$$

$$(S_{\text{tank}})_1 = 2\pi \cdot (3.3 \text{ m}) \cdot 5.1 \text{ m} + 2 \cdot \pi \cdot (3.3 \text{ m})^2 = 174.169896715 \text{ m}^2$$

$$(S_{\text{tank}})_2 = 2\pi \cdot (2.9 \text{ m}) \cdot 4.7 \text{ m} + 2 \cdot \pi \cdot (2.9 \text{ m})^2 = 138.4814041702 \text{ m}^2$$

$$(S_{\text{tank}})_3 = 2\pi \cdot (3.5 \text{ m}) \cdot 6.4 \text{ m} + 2 \cdot \pi \cdot (3.5 \text{ m})^2 = 217.7123708938 \text{ m}^2$$

$$(S_{\text{tank}})_4 = 2\pi \cdot (3.6 \text{ m}) \cdot 6.1 \text{ m} + 2 \cdot \pi \cdot (3.6 \text{ m})^2 = 219.4046309267 \text{ m}^2$$

$$(S_{\text{tank}})_5 = 2\pi \cdot (2.7 \text{ m}) \cdot 4.9 \text{ m} + 2 \cdot \pi \cdot (2.7 \text{ m})^2 = 124.9309625033 \text{ m}^2$$