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Día

Mes

Año

Folio

Tema: TIADSM 7.A 191008

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Alrededor del eje x

③ $y = 2 - \frac{1}{2}x, y = 0, x = 1, x = 2;$

$$= \int_1^2 A(x) dx = \int_1^2 \pi \left(2 - \frac{1}{2}x\right)^2 dx$$

$$= \pi \int_1^2 \left(4 - 2x + \frac{1}{4}x^2\right) dx$$

$$= \pi \left[4x - x^2 + \frac{1}{12}x^3 \right]_1^2$$

$$= \pi \left[\left(8 - 4 + \frac{8}{12}\right) - \left(4 - 1 + \frac{1}{12}\right) \right]$$

$$= \pi \left(1 + \frac{7}{12} \right) = \frac{19}{12} \pi$$

