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Actividad especial:

$$A = 2\int_0^1 x^{1/4}\,dx + 2\int_1^4 \left(\frac{4-x}{3}\right)^{1/2}dx = \frac{28}{5}$$

$$A = 2\left\{\left\{\frac{x^{5/4}}{5/4}\right]\right\}_0^1 + 2\int_1^4 \left(\frac{4-x}{3}\right)^{1/2}dx$$

$$2\left(\left\{\frac{4}{5}(1)^{5/4}\right\} - \left\{\frac{0^{5/4}}{5/4}\right\}\right) =$$

$$= 2\left(\left\{\frac{4}{5} - 0\right\}\right) = 2\left(\frac{4}{5}\right)$$

$$= \frac{8}{5}$$

$$= \frac{8}{5} + 4 = \frac{28}{5} \quad \square$$

$u = \frac{4-x}{3} = \frac{4}{3} - \frac{x}{3}$

$u(4) = 0$

$u(1) = 1$

$du = 0 - \frac{1}{3}dx \qquad du = -\frac{1}{3}dx$

$-3\,du = dx \qquad\qquad -3\,du = dx$

$$= 2\int_1^0 \sqrt{u}\cdot -3\,du =$$

$$= -6\int_1^0 \sqrt{u}\,du$$

$$= 6\int_0^1 \sqrt{u}\,du = 6\left(\frac{2u^{3/2}}{3}\right]_0^1 =$$

$$= 6\left(\left\{\frac{2}{3} - 0\right\}\right) = 6\cdot\frac{2}{3} = \frac{12}{3} = 4$$