

CORRECTION: “\$ cup \$” TYPE FUNCTIONS (VOLUME 35, NO. 1～2: 35-39).

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In the section 3 of Rao (2003), there is a minor correction required for the equation (10) and one equation prior to that. Readers are requested to note the same as below.

When we substitute $x = mu^{2n-2}$ in the equation (9) then

$$\begin{aligned} x \rightarrow 1 &\Rightarrow u \rightarrow m^{2-2n} \\ x \rightarrow mu^{2n-2} - 1 &\Rightarrow u \rightarrow (n - m)^{2-2n} \end{aligned}$$

and area of \cup was given as

$$G = g(1) \frac{u}{v} - m \left(\frac{m}{n - m} \right)^{(2-2n)^2}.$$

Please note that the correct expression for above area is

$$G = g(1) \frac{v}{u} - m \left[(n - m)^{-(2-2n)^2} - m^{-(2-2n)^2} \right].$$

Similarly corrected expression for volume of \cup type vessel is

$$V = \frac{\pi (mu^{2n-2} - 2)}{4} G.$$

References

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