

# CORRECTION

## EXERCICE n°21 :

a. On a :

$$\frac{1}{4} + \frac{1}{2-x} = \frac{2-x+4}{4(2-x)} = \frac{6-x}{4(2-x)} = \frac{x-6}{4(x-2)}.$$

b. On a :

$$\int_{-1}^1 \frac{x-6}{4(x-2)} dx = \int_{-1}^1 \left( \frac{1}{4} + \frac{1}{2-x} \right) dx = \left[ \frac{x}{4} - \ln(2-x) \right]_{-1}^1 = \ln 3 + \frac{1}{2}.$$