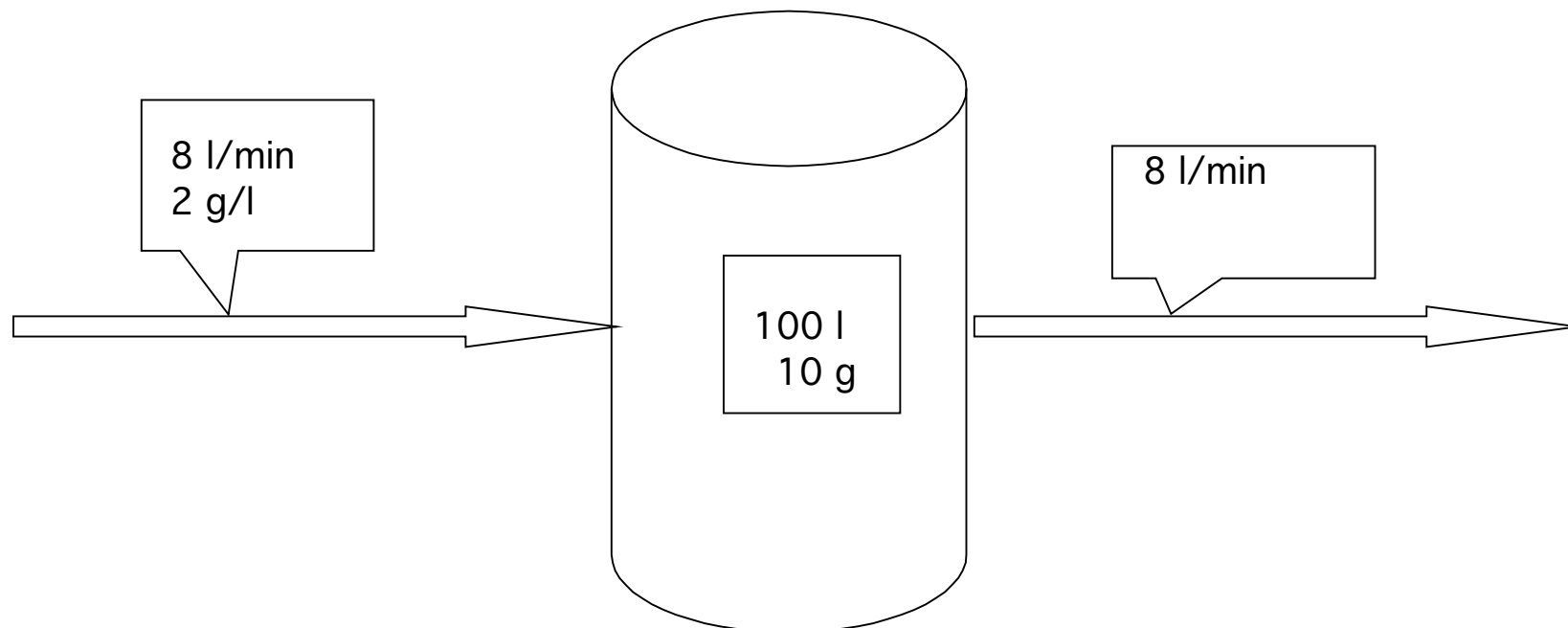


LS5.Version B.



$A(t)$ är antalet gram salt i tanken vid tiden t .

$$\frac{dA}{dt} \text{ g/min} = 8 \text{ l/min} * 2 \text{ g/l} - 8 \text{ l/min} * \frac{A(t)}{100} \text{ g/l}$$

$$\frac{dA}{dt} + \frac{2A(t)}{25} = 16$$

$$A_h = Ce^{-\frac{2t}{25}}$$

$$A_p = 200$$

$$A = Ce^{-\frac{2t}{25}} + 200$$

$$10 = A(0) = C + 200, \quad C = -190$$

$$A(t) = 200 - 190e^{-\frac{2t}{25}}$$