$$L(R, c, \lambda) = R^2 + \sum_{n=1}^{N} \lambda_n \left(|x_n - c|^2 - R^2 \right) = R^2 + \sum_{n=1}^{N} \lambda_n |x_n - c|^2 - R^2 \sum_{n=1}^{N} \lambda_n$$