**peak resolution,** \( R_s \)

*in chromatography*

The separation of two peaks in terms of their average peak width at base \((t_{R_2} > t_{R_1})\):

\[
R_s = \frac{t_{R_2} - t_{R_1}}{w_{b1} + w_{b2}} = \frac{2 (t_{R_2} - t_{R_1})}{w_{b1} + w_{b2}}
\]

In the case of two adjacent peaks it may be assumed that \(w_{b1} \approx w_{b2}\), and thus, the width of the second peak may be substituted for the average value:

\[
R_s \approx \frac{t_{R_2} - t_{R_1}}{w_{b2}}
\]

**Source:**
Orange Book, p. 108