

## Competition Corner: Peak Evidence

g11\_u06\_w23

Original fictional paper-model challenges. Use  $R_s = 2(t_2 - t_1)/(w_1 + w_2)$ . No procedure is implied.

**Challenge 21.** A fictional card has peaks at 4.00 and 4.36 min, each width 0.16 min. Calculate  $R_s$ . If each width increases to 0.20 min with times unchanged, calculate the new value and explain the evidence change.

**Challenge 22.** Three fictional runs give peak pairs 2.00/2.35, 2.02/2.36, and 1.98/2.37 min, with both widths 0.20 min. Calculate all three resolutions. Identify the run with strongest modeled separation and one question that still requires a separate control.