

Estimate Upgrade Answer Key

1. Front-end: 700. Adjustment: 50. Adjusted: 750.
2. Front-end: 800. Adjustment: 80. Adjusted: 880.
3. Front-end: 700. Adjustment: 80. Adjusted: 780.
4. Front-end: 800. Adjustment: 170. Adjusted: 970.
5. Front-end: 5,000. Adjustment: 600. Adjusted: 5,600.
6. Front-end: 6,000. Adjustment: 800. Adjusted: 6,800.
7. Front-end: 7,000. Adjustment: 800. Adjusted: 7,800.
8. Front-end: 8,000. Adjustment: 800. Adjusted: 8,800.

Teacher's Guide

- Quick implementation: Model the example by separating each number into its leading place value and the next place value. Add the front-end values first, then add the adjustment.
- Differentiation: Have students underline the leading digit and circle the digit in the next place before estimating.
- Engagement: Ask students to compare their basic and adjusted estimates and predict which will be closer to the exact sum.
- Extension: Have students calculate each exact sum and find how far both estimates are from the exact answer.