

Q3 Fill in the missing digits:

$$\begin{array}{r} \text{a) } 5\ 9\ 7\ 6\ 4 \\ + 1\ 3\ 5\ 4\ 8 \\ \hline 7\ 3\ 3\ 1\ 2 \end{array}$$

$$\begin{array}{r} \text{b) } 3\ 5\ 9\ 2\ 7 \\ + 2\ 3\ 6\ 4\ 2 \\ \hline 5\ 9\ 5\ 6\ 9 \\ \phantom{5\ 9\ 5\ 6\ 9} 1 \end{array}$$

$$\begin{array}{r} \text{c) } 8\ 9\ 7\ 5 \\ - 2\ 7\ 8\ 4 \\ \hline 6\ 1\ 9\ 1 \end{array}$$

$$\begin{array}{r} \text{d) } 8\ 3\ 7\ 2\ 4 \\ - 2\ 7\ 1\ 1\ 7 \\ \hline 5\ 6\ 6\ 0\ 7 \end{array}$$

Q1. Estimate the difference by rounding each number to the nearest thousand and find the actual difference for each of the following:

a.

Actual Difference

$$\begin{array}{r} \phantom{5\ 6\ 2} 11\ 13 \\ \phantom{5\ 6\ 2} 5\ 1 \\ 5\ 6\ 2\ 3 \\ - 2\ 3\ 6\ 5 \\ \hline 3\ 2\ 5\ 8 \end{array}$$

Estimated Difference

$$\begin{array}{r} 6\ 0\ 0\ 0 \\ - 2\ 0\ 0\ 0 \\ \hline 4\ 0\ 0\ 0 \end{array}$$

The actual difference is 3258 but the estimated difference is 4000.

b.

Actual Difference

$$\begin{array}{r} 2\ 5\ 8\ 9\ 6 \\ - 1\ 2\ 0\ 3\ 6 \\ \hline 1\ 3\ 8\ 6\ 0 \end{array}$$

Estimated Difference

$$\begin{array}{r} 2\ 6\ 0\ 0\ 0 \\ - 1\ 2\ 0\ 0\ 0 \\ \hline 1\ 4\ 0\ 0\ 0 \end{array}$$

The actual difference is closer to the estimated difference.

c.

Actual Difference

$$\begin{array}{r} \phantom{9\ 9} 12\ 16 \\ \phantom{9\ 9} 8\ 2 \\ 9\ 9\ 9\ 3\ 6 \\ - 4\ 5\ 3\ 6\ 9 \\ \hline 5\ 4\ 5\ 6\ 7 \end{array}$$

Estimated Difference

$$\begin{array}{r} 1\ 0\ 0\ 0\ 0\ 0 \\ - 4\ 5\ 0\ 0\ 0 \\ \hline 5\ 5\ 0\ 0\ 0 \end{array}$$

The actual difference is closer to the estimated difference.