ROUNDING AND ESTIMATION EXAMPLE

Estimate 48,372 + 25,618 to the nearest thousand,
then compare the estimate with the exact sum.

Problem

Round each addend to the nearest thousand and estimate the total.

Place-value check

Number	Hundreds digit	Rounded value
48,372	3	48,000
25,618	6	26,000
Estimated total		**74,000**
Exact total		73,990

Step-by-step solution

1. Round 48,372

The hundreds digit is 3, below 5, so keep the thousands digit: 48,372 rounds to 48,000.

2. Round 25,618

The hundreds digit is 6, at least 5, so increase 25 thousand to 26 thousand.

3. Add the rounded values

48,000 + 26,000 = 74,000. This is the estimated sum.

4. Compare with the exact sum

48,372 + 25,618 = 73,990, which is 10 less than the estimate.

ANSWER

Estimate: 74,000 Exact sum: 73,990

The estimate is close: it is only 10 greater than the exact total.