LESSON MAKER PRO

Big Number Moves

Add, subtract, estimate, and choose a useful strategy.

GRADE 4 · 4.NOS.B.3

4.NOS.B.3 "Fluently add and subtract multi-digit whole numbers within 1,000,000. Apply estimation strategies to estimate sums and differences. Use computational strategies (e.g., decomposition, partials sums) efficiently..."

NAME _____ DATE _____

CHOOSE YOUR MOVE

Line up digits by place value when you add or subtract. When subtracting, regroup if a place does not have enough. An estimate can help you check your answer, and adjusting a number close to a round number can sometimes save steps.

WORKED EXAMPLE

Find 473,658 - 126,794.

1. Ones: 8 - 4 = 4. Regroup for tens: 15 - 9 = 6.
2. Regroup for hundreds: 15 - 7 = 8. Regroup for thousands: 12 - 6 = 6.
3. Finish on the left: 6 - 2 = 4 and 4 - 1 = 3.

Answer: 346,864

PRACTICE 6 problems

1 Find 346,278 + 251,432.

ANSWER _____

2 Find 923,405 - 478,216.

ANSWER _____

3 Find 184,750 + 405,060.

ANSWER _____

4 Find 500,000 - 199,999.

ANSWER _____

5 Round each number to the nearest ten thousand to estimate 284,615 + 137,920. Then find the exact sum.

ANSWER _____

6 Round each number to the nearest ten thousand to estimate 708,431 - 265,782. Then find the exact difference.

ANSWER _____

APPLY IT Show your work

1 Players earned 238,475 points during a game tournament on Saturday and 176,890 points on Sunday. How many points did they earn in all?

WORK SPACE

ANSWER _____

2 A reading app recorded 735,250 pages read this year. Students read 286,475 of those pages in October. How many pages did they read during the other months?

WORK SPACE

ANSWER _____

CHALLENGE One step up

A game has 600,000 coins. Players spend 299,998 coins. How many coins remain? Explain why adjusting 299,998 to 300,000 is an efficient way to solve this.

WORK SPACE AND ANSWER

ANSWER KEY

Big Number Moves

GRADE 4 · 4.NOS.B.3

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Find 346,278 + 251,432.	**597,710**
2	Find 923,405 - 478,216.	**445,189**
3	Find 184,750 + 405,060.	**589,810**
4	Find 500,000 - 199,999.	**300,001**
5	Round each number to the nearest ten thousand to estimate 284,615 + 137,920. Then find the exact sum.	**Estimate: 420,000. Exact sum: 422,535.**
6	Round each number to the nearest ten thousand to estimate 708,431 - 265,782. Then find the exact difference.	**Estimate: 440,000. Exact difference: 442,649.**

PART 2 · APPLY IT

1. **415,365 points** Add the points from both days: 238,475 + 176,890 = 415,365.
2. **448,775 pages** Subtract October's pages from the total: 735,250 - 286,475 = 448,775.

CHALLENGE

300,002 coins remain. Subtracting 300,000 gives 300,000. Players spent 2 fewer coins than that, so 2 more coins remain. This avoids regrouping across the zeros.

Accept any correct pencil-and-paper strategy for the exact answers. For the estimates, each number must be rounded to the nearest ten thousand before adding or subtracting.