

Estimate or Exact

Choose a smart strategy for addition and subtraction.

GRADE 4 • 4.CE.1

4.CE.1 "The student will estimate, represent, solve, and justify solutions to single-step and multistep problems, including those in context, using addition and subtraction with whole numbers..."

NAME _____

DATE _____

PICK THE RIGHT ANSWER TYPE

Use an estimate when an amount only needs to be close. Use an exact answer when every item, dollar, or point matters. Round numbers to a helpful place, solve with the rounded numbers, and compare your estimate to nearby benchmarks.

WORKED EXAMPLE

Estimate $3,482 + 2,167$ by rounding each number to the nearest hundred.

1. 3,482 rounds to 3,500.
2. 2,167 rounds to 2,200.
3. Add: $3,500 + 2,200 = 5,700$.

Answer: About 5,700

PRACTICE 6 problems

- 1** Estimate $4,738 + 2,241$ by rounding each number to the nearest hundred.

ANSWER _____

- 2** Find the exact difference: $8,406 - 3,179$.

ANSWER _____

- 3** Find the exact sum: $6,782 + 1,959$.

ANSWER _____

- 4** Estimate $9,126 - 4,488$ by rounding each number to the nearest hundred.

ANSWER _____

- 5** A box holds 7,842 trading cards. It gives away 2,675 cards. How many cards are left?

ANSWER _____

- 6** Use compatible numbers to estimate $3,976 + 1,988$. Is the sum closer to 6,000 or 7,000?

ANSWER _____

APPLY IT Show your work

- 1** The student council is saving for a new outdoor game area that costs 600,000 dollars. It has raised 328,450 dollars from a walkathon and 176,825 dollars from a talent show. How much more money does it need? Is an estimate or an exact answer appropriate?

WORK SPACE

ANSWER _____

- 2** A science museum's space exhibit had 184,320 visitors in June and 207,690 visitors in July. About how many visitors came during both months? Round to the nearest 1,000. Is an estimate or an exact answer appropriate for a quick poster headline?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

At a school game-design contest, teams earned 485,760 bonus points on Friday and 128,945 bonus points on Saturday. They used 236,780 points to unlock prizes. First estimate the points remaining by rounding each number to the nearest thousand. Then find the exact number of points remaining. Is the exact amount a little more than or a little less than your estimate?

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Estimate $4,738 + 2,241$ by rounding each number to the nearest hundred.	6,900
2	Find the exact difference: $8,406 - 3,179$.	5,227
3	Find the exact sum: $6,782 + 1,959$.	8,741
4	Estimate $9,126 - 4,488$ by rounding each number to the nearest hundred.	4,600
5	A box holds 7,842 trading cards. It gives away 2,675 cards. How many cards are left?	5,167 cards
6	Use compatible numbers to estimate $3,976 + 1,988$. Is the sum closer to 6,000 or 7,000?	6,000

PART 2 • APPLY IT

- 94,725 dollars; an exact answer is appropriate.** Add 328,450 and 176,825 to get 505,275. Subtract 505,275 from 600,000 to get 94,725, and an exact amount is needed for the budget.
- About 392,000 visitors; an estimate is appropriate.** Round 184,320 to 184,000 and 207,690 to 208,000. Add to get about 392,000 visitors, which is enough for a quick headline.

CHALLENGE

Estimate: 378,000 points. Exact: 377,925 points, which is a little less than 378,000.

For estimates, accept only results that use the rounding place named in the problem. In the challenge, accept equivalent wording for "a little less than 378,000."