

Close or Exact?

Choose the answer type, then refine your estimate.

GRADE 4 • 4.CE.1.a

4.CE.1.a "Determine and justify whether an estimate or an exact answer is appropriate when solving contextual problems involving addition and subtraction with whole numbers. Refine estimates by adjusting the final amount..."

NAME _____

DATE _____

PICK THE BEST ANSWER

Use an estimate when you need an amount that is close. Use an exact answer when every item must be counted. Round first, then describe whether the result is closer to, between, or a little more or less than a benchmark.

WORKED EXAMPLE

A zoo counts 346 visitors in the morning and 152 in the afternoon.
About how many visitors came?

1. Round 346 to 350.
2. Round 152 to 150.
3. Add: $350 + 150 = 500$.
4. The exact total, 498, is a little less than 500.

Answer: Estimate: about 500 visitors.

PRACTICE 5 problems

- 1** A club has 287 stickers and gets 314 more. About how many stickers does it have? Write a refined estimate.

ANSWER _____

- 2** A class has 672 beads and uses 258. How many beads are left for the count sheet?

ANSWER _____

- 3** A team collects 438 cans on Monday and 251 cans on Tuesday. Is the total closer to 600 or 700 cans?

ANSWER _____

- 4** A museum has 905 visitors before lunch and 188 after lunch. It must report the exact total. How many visitors came?

ANSWER _____

- 5** A store has 763 trading cards and sells 341. About how many cards remain? Use tens and refine your estimate.

ANSWER _____

APPLY IT Show your work

- 1** The robotics club has 1,248 points. It earns 376 more points. The score screen needs the exact total. What is the total? Tell why an exact answer is best.

WORK SPACE

ANSWER _____

- 2** A playlist contest gets 1,673 votes on Tuesday and 2,218 votes on Wednesday. The host only needs about how many votes were cast. Give a refined estimate.

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

Ari says $1,489 + 2,612$ is closer to 4,000 than to 4,100. Is Ari correct? Find the exact sum and explain.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	A club has 287 stickers and gets 314 more. About how many stickers does it have? Write a refined estimate.	Estimate: a little more than 600 stickers.
2	A class has 672 beads and uses 258. How many beads are left for the count sheet?	Exact answer: 414 beads.
3	A team collects 438 cans on Monday and 251 cans on Tuesday. Is the total closer to 600 or 700 cans?	Estimate: closer to 700 cans.
4	A museum has 905 visitors before lunch and 188 after lunch. It must report the exact total. How many visitors came?	Exact answer: 1,093 visitors.
5	A store has 763 trading cards and sells 341. About how many cards remain? Use tens and refine your estimate.	Estimate: about 420 cards, a little more than four hundred.

PART 2 • APPLY IT

1. **Exact answer: 1,624 points. The score screen needs the real total.** Add $1,248 + 376 = 1,624$. An exact answer is needed because the score is recorded.
2. **Estimate: a little less than 3,900 votes.** Round to hundreds: $1,700 + 2,200 = 3,900$. The exact sum is 3,891, so the amount is a little less than 3,900.

CHALLENGE

No. The exact sum is 4,101, which is closer to 4,100 because it is 1 away from 4,100.

Accept equivalent refined language, such as “just over 600” for Problem 1. For exact-answer situations, accept the correct total only when the student also identifies why an exact answer is needed.