

Exact or Estimate?

Decide which kind of answer each problem needs.

3.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 where addends and minuends do not exceed 1,000..."

NAME _____

DATE _____

EXACT ANSWER

Use an exact answer when you need the real total or difference. Solve carefully to find the precise number.

394 - 156, when a tailor needs the number of buttons left.

ESTIMATE ANSWER

Use an estimate when a close answer is enough or when the question says about. Round or use friendly numbers to find a reasonable answer.

472 + 214, to predict a zoo's visitors.

1 SORT

8 items

Circle EXACT or ESTIMATE for each problem, then choose two items and explain why each needs that type of answer.

1. A chef has 450 apples and uses 128. How many apples are left for pies? EXACT ESTIMATE
2. A parade has 286 walkers and 173 musicians. How many people are in the parade? EXACT ESTIMATE
3. About how many books are on two shelves with 347 books and 221 books? EXACT ESTIMATE
4. A class collects 365 cans on Monday and 189 cans on Tuesday. How many cans did the class collect? EXACT ESTIMATE
5. A store has 612 balloons and sells 278. About how many balloons are left? EXACT ESTIMATE
6. About how many points did two teams score if one scored 154 points and the other scored 436 points? EXACT ESTIMATE
7. A farmer packs 279 eggs in the morning and 126 eggs in the afternoon. How many eggs are packed? EXACT ESTIMATE
8. A museum has 563 visitors. Then 142 visitors leave and 75 visitors arrive. How many visitors are there now? EXACT ESTIMATE

2

PROVE IT

Explain your thinking

Pick two items from Part 1. For each one, tell how you knew where it belonged.

ITEM # _____ HOW I KNEW _____

ITEM # _____ HOW I KNEW _____

3

MAKE YOUR OWN

One of each

Write one new problem that needs an EXACT answer and one new problem that needs an ESTIMATE answer.

EXACT

ESTIMATE

CHALLENGE

Write a two-step story problem using addition and subtraction, then tell whether an estimate or an exact answer is best and why.

PART 1 • SORT

#	ITEM	CATEGORY	WHY
1	A chef has 450 apples and uses 128. How many apples are left for pies?	EXACT	The chef needs the precise number of apples left.
2	A parade has 286 walkers and 173 musicians. How many people are in the parade?	EXACT	The question asks for the actual total.
3	About how many books are on two shelves with 347 books and 221 books?	ESTIMATE	The word about signals that a close answer is enough.
4	A class collects 365 cans on Monday and 189 cans on Tuesday. How many cans did the class collect?	EXACT	The class needs the real number of cans collected.
5	A store has 612 balloons and sells 278. About how many balloons are left?	ESTIMATE	The word about signals an estimate.
6	About how many points did two teams score if one scored 154 points and the other scored 436 points?	ESTIMATE	The question asks for an approximate total.
7	A farmer packs 279 eggs in the morning and 126 eggs in the afternoon. How many eggs are packed?	EXACT	The question asks for the actual total.
8	A museum has 563 visitors. Then 142 visitors leave and 75 visitors arrive. How many visitors are there now?	EXACT	The museum needs the precise number after two changes.

PART 2 • PROVE IT

Accept any explanation that names the deciding feature from the rule box for the chosen item.

PART 3 • MAKE YOUR OWN (SAMPLE ANSWERS)

- **EXACT:** A museum has 318 tickets and sells 127 tickets. How many tickets are left?
- **ESTIMATE:** About how many shells did two children find if one found 263 and the other found 418?

Challenge: A library has 640 books. It gives away 185 books and gets 72 new books. How many books does it have now? An exact answer is best because the library needs the real number. $640 - 185 + 72 = 527$.

Items 1, 2, 4, 7, and 8 are EXACT. Items 3, 5, and 6 are ESTIMATE. Accept equivalent student-created problems when the answer type and explanation match.