

Exact or Close?

Choose the answer that fits the situation.

GRADE 4 • 4.CE.2.a

4.CE.2.a "Determine and justify whether an estimate or an exact answer is appropriate when solving contextual problems involving multiplication and division of whole numbers. Refine estimates by adjusting the final amount..."

NAME _____

DATE _____

PICK THE BEST METHOD

Use an exact answer when you must count, share, pay, or have enough items. Use an estimate when a close amount is enough, then refine it with words such as closer to, between, or a little more than.

WORKED EXAMPLE

A reader finishes 49 pages each day for 5 days. About how many pages does the reader finish?

1. 49 is closer to 50.
2. $50 \times 5 = 250$.
3. The total is a little less than 250.

Answer: About 250 pages, a little less than 250.

PRACTICE 5 problems

- 1** Tickets cost \$8 each. A class buys 19 tickets. Choose exact or estimate, then solve.

ANSWER _____

- 2** About how many beads are in 62 bags of 4 beads? Refine your estimate.

ANSWER _____

- 3** 287 library books are placed equally on 7 carts. Choose exact or estimate, then solve.

ANSWER _____

- 4** A zoo has 29 groups of 11 visitors. A guide needs a quick estimate. About how many visitors?

ANSWER _____

- 5** 156 crayons are packed 12 per box. Choose exact or estimate, then solve.

ANSWER _____

APPLY IT Show your work

- 1** A game club needs wristbands for 27 tables with 8 players at each table. Should the club estimate or find an exact answer? How many wristbands are needed?

WORK SPACE

ANSWER _____

- 2** A news club wants a quick headline, not an exact count. Six buses carry 48 students each. Should the club estimate or find an exact answer? Give a refined estimate.

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A library packs 23 books in each of 9 cartons. A flyer says, "about 200 books." Is that reasonable? Explain in exactly two sentences.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Tickets cost \$8 each. A class buys 19 tickets. Choose exact or estimate, then solve.	Exact, \$152.
2	About how many beads are in 62 bags of 4 beads? Refine your estimate.	About 240 beads, a little more than 240.
3	287 library books are placed equally on 7 carts. Choose exact or estimate, then solve.	Exact, 41 books on each cart.
4	A zoo has 29 groups of 11 visitors. A guide needs a quick estimate. About how many visitors?	About 330 visitors, a little less than 330.
5	156 crayons are packed 12 per box. Choose exact or estimate, then solve.	Exact, 13 boxes.

PART 2 • APPLY IT

1. **Exact, 216 wristbands.** The club must have one wristband for every player. Multiply $27 \times 8 = 216$.
2. **Estimate, about 300 students, a little less than 300.** Round 48 to 50, then multiply $50 \times 6 = 300$. Since 48 is less than 50, the total is a little less than 300.

CHALLENGE

Yes. The exact total is 207, so it is a little more than 200 and closer to 200 than 300.

Accept equivalent refined estimates that use sensible rounding and clear comparison words. Exact-answer items should include both the method choice and the correct total.