

Mission Math Mix

Estimate, solve, and check each mission.

GRADE 5 • 5.CE.1.b.i

5.CE.1.b.i "Represent, solve, and justify solutions to single-step and multistep contextual problems by applying strategies (e.g., estimation, properties of addition and multiplication) and algorithms, including the standard algorithm..."

NAME _____

DATE _____

PLAN, SOLVE, CHECK

Estimate first so you can tell whether your answer makes sense. Solve one operation at a time, using a standard algorithm when it helps. Check by using the inverse operation or by comparing your answer to your estimate.

WORKED EXAMPLE

Find 248×36 .

1. Estimate: $250 \times 40 = 10,000$.
2. Multiply ones: $248 \times 6 = 1,488$.
3. Multiply tens: $248 \times 30 = 7,440$.
4. Add: $1,488 + 7,440 = 8,928$.

Answer: 8,928

PRACTICE 6 problems

1 $4,786 + 3,459 =$

ANSWER _____

2 $9,002 - 4,687 =$

ANSWER _____

3 $127 \times 54 =$

ANSWER _____

4 $8,736 \div 24 =$

ANSWER _____

5 $6,305 \div 35 =$

ANSWER _____

6 $(6,420 - 1,875) + 2,609 =$

ANSWER _____

APPLY IT Show your work

- 1** The game design club has 27 sticker sheets with 32 stickers on each sheet. Club members give away 158 stickers at a school event. How many stickers are left?

WORK SPACE

ANSWER _____

- 2** A robotics team has 4,536 screws. The team uses 128 screws to build a robot, then shares the rest equally among 8 repair kits. How many screws go in each repair kit?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A video club has 2,184 votes to divide equally among 7 finalist videos. Each finalist then receives 46 bonus votes. How many votes does each finalist have? Explain how an estimate helps you check your answer.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	$4,786 + 3,459 =$	8,245
2	$9,002 - 4,687 =$	4,315
3	$127 \times 54 =$	6,858
4	$8,736 \div 24 =$	364
5	$6,305 \div 35 =$	180 R5
6	$(6,420 - 1,875) + 2,609 =$	7,154

PART 2 • APPLY IT

1. **706 stickers** Multiply 27×32 to find 864 stickers. Subtract 158 from 864 to get 706.
2. **551 screws** Subtract 128 from 4,536 to get 4,408 screws. Divide 4,408 by 8 to get 551.

CHALLENGE

358 votes each. An estimate is $2,100 \div 7 + 50 = 350$, so 358 is reasonable. Exactly, $2,184 \div 7 = 312$ and $312 + 46 = 358$.

Accept standard algorithms, place-value strategies, or equivalent correct methods. For the challenge, accept any reasonable estimate and an explanation showing that 358 is close to it.