LESSON MAKER PRO

Multiply Mission

Estimate, solve, and check multiplication problems.

GRADE 4 · 4.CE.2.h

4.CE.2.h "Estimate, represent, solve, and justify solutions to single-step and multistep contextual problems that involve multiplication with whole numbers."

NAME _____ DATE _____

MULTIPLY AND CHECK

Estimate by rounding a factor to a nearby friendly ten, then multiply. To solve exactly, break one factor apart and multiply each part. Compare your exact answer with your estimate to see whether it makes sense.

WORKED EXAMPLE

Find 23 * 4.

1. Estimate: 23 is about 20.
2. 20 * 4 = 80.
3. Break apart: 20 * 4 = 80 and 3 * 4 = 12.
4. Add: 80 + 12 = 92.

Answer: 92

PRACTICE 6 problems

1 Estimate 38 * 7. Round 38 to the nearest ten.

ANSWER _____

2 Write a break-apart equation and solve: 46 * 5.

ANSWER _____

3 Find 72 * 8.

ANSWER _____

4 Which is a reasonable estimate for 19 * 9: 90, 180, or 900?

ANSWER _____

5 Find 125 * 6.

ANSWER _____

6 A craft club puts 12 beads on each of 34 keychains. How many beads do they use?

ANSWER _____

APPLY IT Show your work

1 At a robotics event, 16 teams have 7 students on each team. Each student receives 3 challenge cards. Estimate the total number of cards by rounding 16 to the nearest ten. Then find the exact total.

WORK SPACE

ANSWER _____

2 During a five-week reading quest, a class finishes 18 books each week. Each book earns 9 points. Estimate by rounding 18 to the nearest ten, then find the exact number of points.

WORK SPACE

ANSWER _____

CHALLENGE One step up

A student says 39 * 8 is about 240 because 39 rounds to 30. Do you agree? Write two sentences to explain, then find the exact product.

WORK SPACE AND ANSWER

ANSWER KEY

Multiply Mission

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PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Estimate 38 * 7. Round 38 to the nearest ten.	**280**
2	Write a break-apart equation and solve: 46 * 5.	**40 * 5 + 6 * 5 = 230**
3	Find 72 * 8.	**576**
4	Which is a reasonable estimate for 19 * 9: 90, 180, or 900?	**180**
5	Find 125 * 6.	**750**
6	A craft club puts 12 beads on each of 34 keychains. How many beads do they use?	**408 beads**

PART 2 · APPLY IT

1. **Estimate: 420 cards. Exact: 336 cards.** Round 16 to 20, then multiply 20 * 7 * 3 = 420. For the exact total, multiply 16 * 7 = 112, then 112 * 3 = 336.
2. **Estimate: 900 points. Exact: 810 points.** Round 18 to 20, then multiply 20 * 5 * 9 = 900. For the exact total, multiply 18 * 5 = 90, then 90 * 9 = 810.

CHALLENGE

No. 39 rounds to 40, so the estimate is 320, and the exact product is 312.

Accept equivalent break-apart equations for problem 2. For estimates, accept answers based on the rounding direction named in each problem.