

Estimate It Out

Use rounding and compatible numbers to find reasonable answers.

GRADE 5 • 5.CE.3.a

5.CE.3.a "Apply estimation strategies (e.g., rounding to the nearest whole number, tenth or hundredth; compatible numbers, place value) to determine a reasonable solution for single-step and multistep contextual problems involving addition..."

NAME _____

DATE _____

MAKE NUMBERS FRIENDLY

Round decimals to a place that makes the math easier, then solve with the rounded numbers. For division, you can choose compatible numbers that divide evenly and are close to the original numbers.

WORKED EXAMPLE

Estimate $12.48 + 15.36$.

1. Round 12.48 to 12.
2. Round 15.36 to 15.
3. Add: $12 + 15 = 27$.

Answer: About 27

PRACTICE 6 problems

- 1** Estimate $3.84 + 5.16$. Round each number to the nearest whole number.

ANSWER _____

- 2** Estimate $14.72 - 6.29$. Round each number to the nearest whole number.

ANSWER _____

- 3** Estimate 2.47×9.6 . Round each number to the nearest whole number.

ANSWER _____

- 4** Estimate 7.92×4.08 . Round each number to the nearest whole number.

ANSWER _____

- 5** Estimate $18.6 \div 3.1$. Use compatible numbers.

ANSWER _____

- 6** Estimate $0.84 \div 0.21$. Round each number to the nearest tenth.

ANSWER _____

APPLY IT Show your work

- 1** Three friends each buy a game controller for \$24.68 and a charging cable for \$6.42. Estimate the total amount the three friends spend. Round each price to the nearest whole dollar.

WORK SPACE

ANSWER _____

- 2** A school music club has \$57.35. The club earns \$18.72 from selling tickets and spends \$12.49 on posters. Estimate how much money the club has after earning and spending. Round each amount to the nearest whole dollar.

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A robotics club buys 4 kits that cost \$12.49 each. The club uses a \$8.37 discount coupon. Estimate the final cost using nearest whole numbers. Explain your reasoning.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Estimate $3.84 + 5.16$. Round each number to the nearest whole number.	About 9
2	Estimate $14.72 - 6.29$. Round each number to the nearest whole number.	About 9
3	Estimate 2.47×9.6 . Round each number to the nearest whole number.	About 20
4	Estimate 7.92×4.08 . Round each number to the nearest whole number.	About 32
5	Estimate $18.6 \div 3.1$. Use compatible numbers.	About 6
6	Estimate $0.84 \div 0.21$. Round each number to the nearest tenth.	About 4

PART 2 • APPLY IT

1. **About \$93** Round \$24.68 to \$25 and \$6.42 to \$6. One set costs about \$31, and $3 \times \$31 = \93 .
2. **About \$64** Round the amounts to \$57, \$19, and \$12. Then calculate $\$57 + \$19 - \$12 = \64 .

CHALLENGE

About \$40. Round \$12.49 to \$12 and \$8.37 to \$8. Then $4 \times \$12 = \48 , and $\$48 - \$8 = \$40$.

Accept estimates that use the rounding place named in each problem. For the compatible-number division problem, accept a close estimate if the student chooses nearby numbers that divide evenly and shows a reasonable strategy.