NAME_____

Module 5   Decimal Operations, Exponents, and Powers
Lesson 3   Adding and Subtracting Decimals

Lesson Objectives

- Estimate decimal sums and differences using rounding and front-end estimation.
- Model addition and subtraction of decimals using diagrams and/or illustrations of manipulatives.
- Develop and use algorithms to add and to subtract numbers containing decimals (up to thousandths place).

Subtopic 1   Estimation of Decimal Sums and Differences

To estimate decimal sums and differences:
- Estimate the _____ or the _____ and_____.
- Find the sum or difference of the _____ numbers.

1 Diane has three $10 bills. At the sporting goods store, she sees a baseball cap that costs $14.95 and a tee shirt that costs $12.45. Estimate the total cost of both items. If Diane has enough money to buy both items, estimate the change Diane would receive if she bought the items.
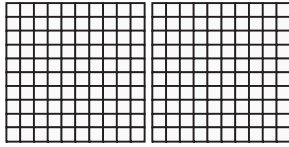
2 Will sees three cookbooks in a bookstore. The books cost $15.99, $18.75, and $22.25. Estimate the total cost of the three books. Can Will buy the books using only a $50 bill?

Subtopic 2   **Adding Decimals Using Models and the Standard Algorithm**
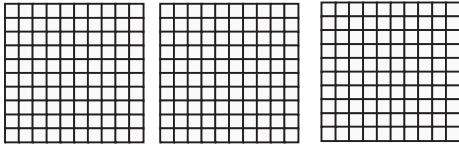
To add decimals:
- Write the addends in a column, lining up the _____.
- Add each _____ and regroup as necessary.
- Put the decimal point in the answer in the _____ as in the problem.

Find the sum.

3 $0.8 + 0.3$

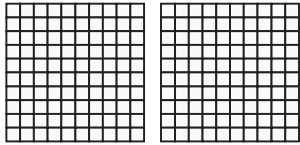**4** $1.45 + 0.65$

5 $3.57 + 0.6$

Module 5   Decimal Operations, Exponents, and Powers
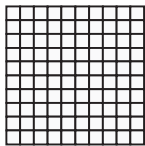**Lesson 3   Adding and Subtracting Decimals**

Subtopic 3   **Subtracting Decimals Using Models**

Subtract using a model.

6   1.2 – 0.12

7   0.3 – 0.03

Subtopic 4   **Standard Decimal Subtraction**

To subtract decimals:
Write the numbers in a column, lining up the _____ and like place values.
_____each place value and regroup if necessary.
Place the _____ in the answer in the same position as in the problem.

Estimate and find the difference.

8   9.28 − 3.451

9   12.1 − 4.67