

Grade 6 – N08 within Unit 7: Division (Decimal numbers by one-digit whole number multipliers) (Application of Partitioning)

N08 Students will be expected to demonstrate an understanding of multiplication and division of decimals (one-digit whole number multipliers and one-digit natural number (no zeroes) divisors). [C, CN, ME, PS, R, V]

Performance Indicators

N08.01 Model the multiplication and division of decimals using concrete and visual representations.

N08.02 Predict ~~products and~~ quotients of decimals using estimation strategies.

N08.03 ~~Place the decimal point in a product using front-end estimation (e.g., For 15.205×4 , think 15×4 , so the product is greater than 60.).~~ **(Not applicable in unit 7)**

N08.04 Place the decimal point in a quotient using front-end estimation (e.g., For $\$25.83 \div 4$, think $\$24 \div 4$, so the quotient is greater than \$6.).

N08.05 Use estimation to correct errors of decimal point placement in a given ~~product or~~ quotient without using paper and pencil.

N08.06 Create and solve story problems that involve ~~multiplication and~~ division of decimals using multipliers from 0 to 9 and divisors from 1 to 9.

N08.07 Solve a given problem, using a personal strategy, and record the process symbolically.

** In Unit 7, students are only expected to work with division of decimals by a whole number. Multiplication of a decimal and a whole number was introduced in unit 5. Students will continue to practice this outcome in Unit 8 & 9 through mental math and daily number routines.*

Limited	Developing	Competent	In-Depth
Student can model and solve division of a whole number by a whole number using concrete materials and pictorial representations (ex. arrays) and symbolically record the process. Student can predict a quotient of two whole numbers using a personal strategy. Student can create and/or solve story problems that involve division of whole numbers using a personal strategy.	Student can model division of a decimal number by a whole number using concrete materials (ex. base-10, money). Student can predict some products of a decimal and a whole number using an estimation strategy. Student can sometimes estimate to correct decimal point placement without using pencil and paper. Student can create and/or solve story problems that involve the division of a decimal number by a whole number using a personal strategy.	Student can model division of a decimal number by a whole number using concrete materials and pictorial representations. Student can predict reasonable quotients of a decimal and a whole number using estimation strategies. Student can place a decimal point in a quotient using front end estimation. Student can estimate to correct decimal point placement without using pencil and paper. Student can create and solve story problems that involve division of a decimal number by a whole number using a personal strategy and record the process symbolically.	Student can predict reasonable quotients of a decimal and a whole number using a variety of estimation strategies and justify the strategy used. Student can create and solve a variety of story problems (see p.228 in the curriculum document) that involve the division of a decimal number by a whole number by selecting an efficient and organized personal strategy and recording the process symbolically.