

Activity 12 Assessment

Multiplying Decimals

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Estimates the product of two decimals

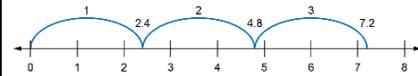
$$3.8 \times 12.3$$

"3.8 is close to 4 and 12.3 is close to 12. I can estimate the product as 4×12 , which is 48."

Multiplies a decimal by a whole number using a method of their choice

$$3 \times 2.4$$

"I can think of this as 3 hops of 2.4 on a number line.



$$3 \times 2.4 = 7.2$$

Multiplies a decimal by a decimal using whole numbers

"To calculate 12.8×9.3 , I can multiply each number in the product by 10. The calculation becomes 128×93 , which I know how to do.

$$\begin{array}{r} 128 \\ \times 93 \\ \hline 384 \\ 11520 \\ \hline 11904 \end{array}$$

Since I multiplied the terms in the product by 10×10 , or 100, I need to divide my answer by 100.
 $12.8 \times 9.3 = 119.04$."

Solves applied problems that involve the multiplication of decimals

Nola earns \$28.74 per hour as an apprentice millwright. How much do they earn in 7.5 h?

"I know $8 \times 30 = 240$, so my answer should be less than \$240. I need to determine 28.74×7.5 . I create a related product by multiplying the first number by 100 and the second number by 10.

$$\begin{array}{r} 2874 \\ \times 75 \\ \hline 14370 \\ 201180 \\ \hline 215550 \end{array}$$

Since I multiplied by 100×10 , or 1000, I divide the answer by 1000. Nola earns \$215.55."

Number

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Observations/Documentation			