

Name _____

Apply Properties of Multiplication to Decimals

Florida's B.E.S.T.

- Number Sense & Operations 5.NSO.2.4, 5.NSO.2.5
- Mathematical Thinking & Reasoning MTR.1.1, MTR.2.1, MTR.3.1, MTR.5.1

I Can use properties of multiplication to solve problems.

You can use the properties of multiplication to help you evaluate numerical expressions more easily.

Properties of Multiplication	
Commutative Property of Multiplication If the order of factors changes, the product stays the same.	$3.6 \times 4.25 = 4.25 \times 3.6$
Associative Property of Multiplication If the grouping of factors changes, the product stays the same.	$1.2 \times (3 \times 5.64) = (1.2 \times 3) \times 5.64$
Identity Property of Multiplication The product of any number and 1 is that number.	$7.982 \times 1 = 7.982$
Zero Property of Multiplication The product of any number and 0 is 0.	$9.6 \times 0 = 0$



UNLOCK the Problem Real World

Kalea purchases 1.5 rows of seats for the play. Each row has 8 seats. If every seat costs \$6.25, how much did she pay?

Use properties to find $8 \times 6.25 \times 1.5$.

$$8 \times 6.25 \times 1.5 = 6.25 \times \underline{\hspace{2cm}} \times 1.5$$

Use the _____ Property to reorder the factors.

$$= 6.25 \times (8 \times \underline{\hspace{2cm}})$$

Use the _____ Property to group the factors.

$$= 6.25 \times \underline{\hspace{2cm}}$$

Use mental math to multiply.

$$= \underline{\hspace{2cm}}$$

Kalea pays \$ _____ for the seats.



Math Talk

MTR 4.1 Engage in discussions on mathematical thinking.

Explain why grouping 8 and 1.5 makes the problem easier to solve.

