

Lesson 22: Divide Whole Numbers by 0.1 and 0.01

• Let's divide whole numbers by one tenth and one hundredth.

Warm-up: Number Talk: Remember Division of Unit Fractions

Find the value of each expression mentally.

•
$$1 \div \frac{1}{10}$$

•
$$2 \div \frac{1}{10}$$

• 2 ÷ 0.01



22.1: Patterns in Dividing by Decimal Units

1. Find the value of each expression. Explain or show your reasoning. Use a diagram if it is helpful.

a. 3 ÷ 0.1

b. 3 ÷ 0.01

 $\mathsf{c.}\ 4\div0.1$

d. $4 \div 0.01$

2. What patterns do you notice?



22.2: Divide Whole Numbers by Decimals

1. Describe how you can find the value of any whole number divided by 0.1. Use a diagram if it is helpful.

2. Describe how you can find the value of any whole number divided by 0.01. Use a diagram if it is helpful.

