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.

- $1 \div \frac{1}{10}$

- $2 \div \frac{1}{10}$

- $1 \div 0.01$

- $2 \div 0.01$

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. $3 \div 0.1$

   b. $3 \div 0.01$

   c. $4 \div 0.1$

   d. $4 \div 0.01$

2. What patterns do you notice?

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   _____

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.

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

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