

Lesson 23: Divide Whole Numbers by Decimals

- Let's divide whole numbers by decimals.

Warm-up: True or False: Tenths and Hundredths

Decide if each statement is true or false. Be prepared to explain your reasoning.

- $6 \div 0.01 = 60$

- $6 \div 0.1 < 6 \div 0.01$

- $6 \div 0.01 = 60 \div 0.1$

23.1: Same Divisor, Different Dividend

1. Find the value of each expression. Explain or show your reasoning.

a. $1 \div 0.2$

b. $2 \div 0.2$

c. $3 \div 0.2$

d. $4 \div 0.2$

2. Find the value of each expression. Explain or show your reasoning.

a. $1 \div 0.02$

b. $2 \div 0.02$

c. $3 \div 0.02$

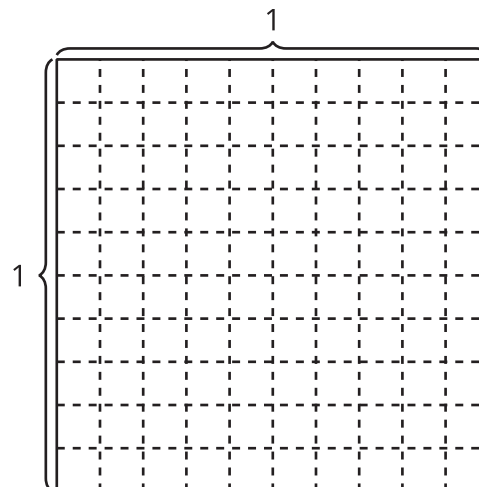
d. $4 \div 0.02$

3. What patterns do you notice?

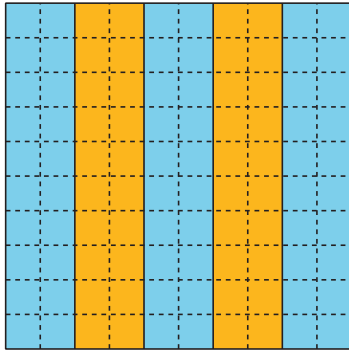
23.2: Evaluate Expressions

- Find the value of the expression. Use a diagram if it is helpful.

$$12 \div 0.2$$



2. This is the diagram and explanation Tyler used to justify why $12 \div 0.2 = 60$.



$12 \div 0.2 = 60$
 There are 5 groups of 0.2 in 1
 and there are 12 so that is
 12 groups of 5.

Explain how the expression $12 \times (1 \div 0.2)$ relates to Tyler's reasoning.

3. Find the value of each expression.

a. $14 \div 0.5$

b. $5 \div 0.25$