How do you divide

$$1.6 \div 0.2?$$

LEARNZILLION

In this lesson you will learn how to divide decimals by using a number line.

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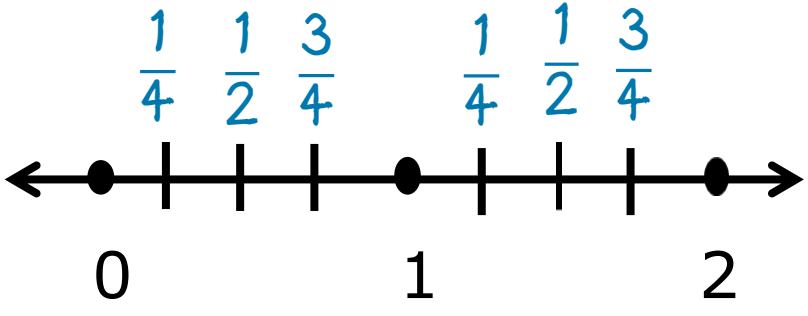
Let's Review

Number lines can show both whole numbers and fractions.



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A Common Mistake

Forgetting to take the decimal into consideration when dividing.

$$12 \div 0.6 \neq 2$$

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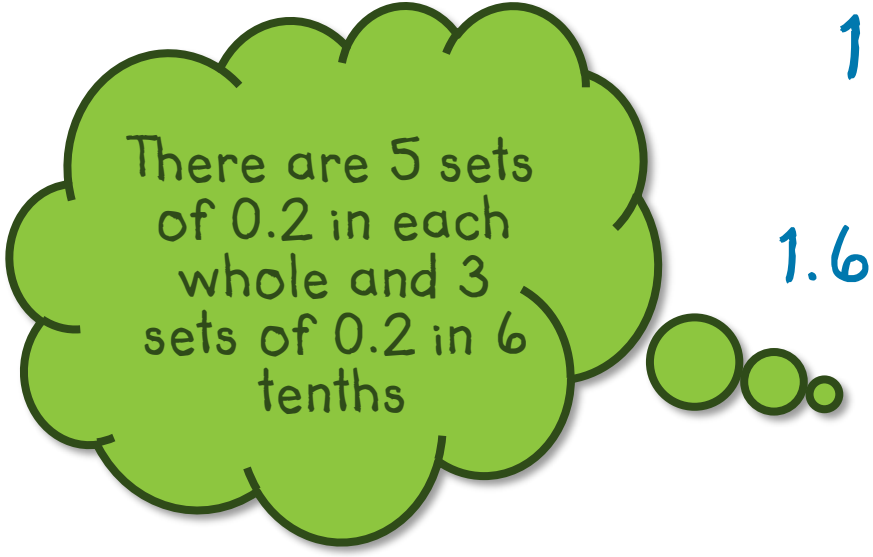
Core Lesson



Smart Estimate

$1.6 \div 0.2$

$1.6 \div 0.2 = 8$

Smart estimate:
8

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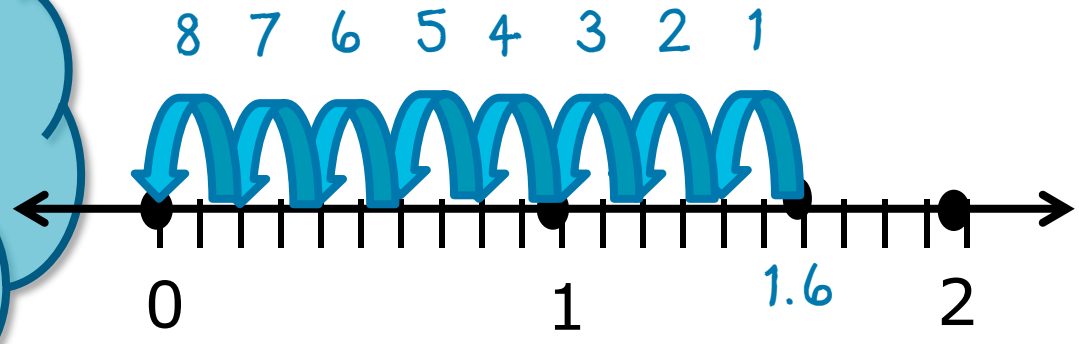
Core Lesson

$1.6 \div 0.2 = 8$

This is a reasonable answer since it matches my smart estimate



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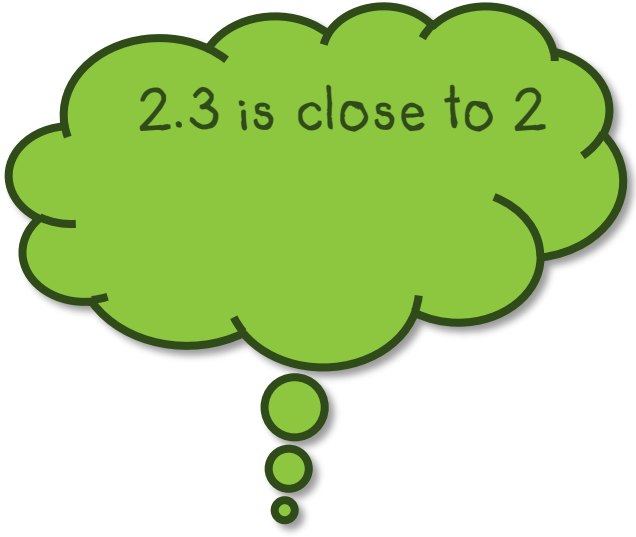
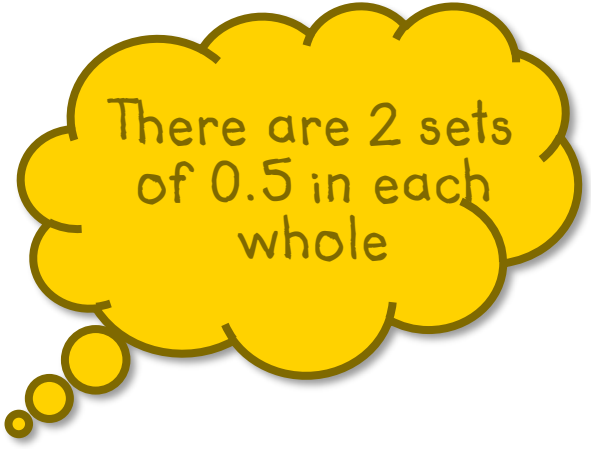
Core Lesson

Susie wants to walk to school which is 2.3 miles away. She wants to walk 0.5 of a mile and then take a break. How many breaks will she take?



$2.3 \div 0.5 \approx$

$2 \div 0.5 \approx 4$



Smart estimate:
4

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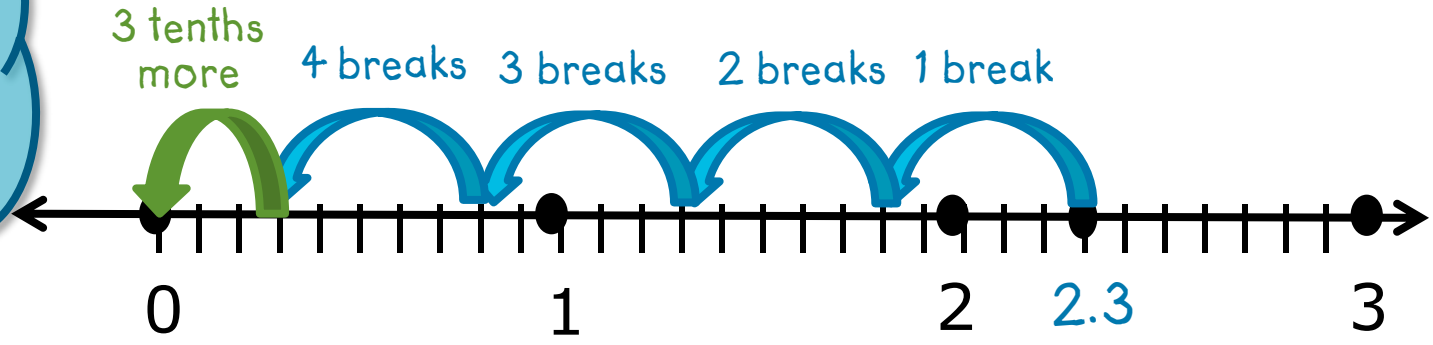
Core Lesson

$2.3 \div 0.5 = 4$ breaks

Then she will walk 3 tenths more

This is a reasonable answer since it is close to my smart estimate



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In this lesson you have learned how to divide decimals by using a number line.

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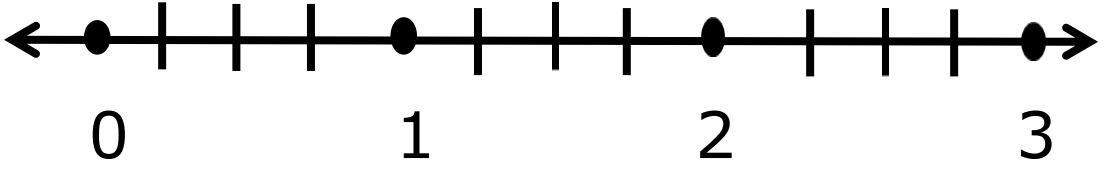
Guided Practice

$$2.5 \div 0.25$$



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Extension Activities

Fred buys 1.10 pounds of apples for a total price of $3.30. Use a number line to show how much he paid per pound.

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Extension Activities

Explain why the quotient can be a whole number when we are dividing a decimal by a decimal.

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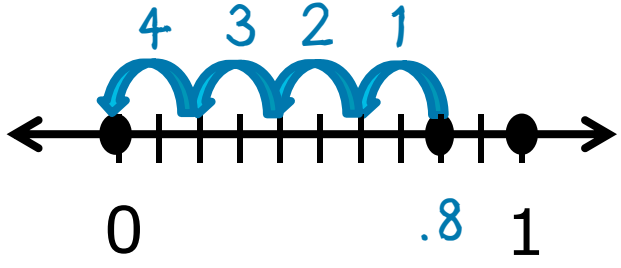
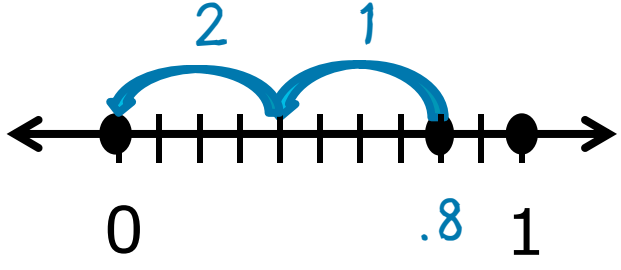
Quick Quiz

Which number line shows 0.8 divided by 0.2?

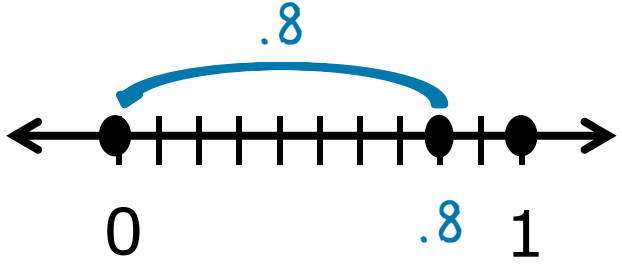
A



B



C



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