

DECIMAL NUMBERS

A DEFINITION

Definition Decimal Number

A **decimal number** is a number that has a decimal point. The decimal point separates the whole number part from the part that is smaller than one. We can write a decimal number in different ways:

- **Numerical form** (how we usually write it):

$$35.4$$

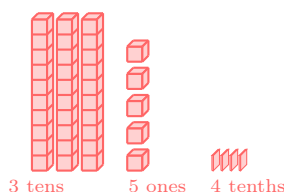
- **Expanded form** :

$$\begin{aligned} &3 \text{ tens} + 5 \text{ ones} + 4 \text{ tenths} \\ &30 + \quad 5 + \quad \frac{4}{10} \\ &3 \times 10 + \quad 5 \times 1 + \quad 4 \times \frac{1}{10} \end{aligned}$$

- **Table**:

Tens	Ones	.	Tenths	3
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- **Blocks**:

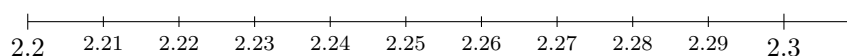


B ON THE NUMBER LINE

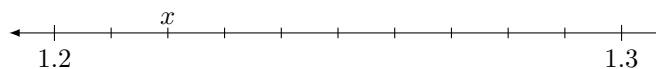
Method How to Draw a Number Line for a Decimal Number

Here's how to put a decimal number on a number line:

1. **Choose your range**: If your numbers are between 2.2 and 2.3, your number line starts at 2.2 and ends at 2.3.
2. **Divide into ten equal parts**: On a number line from 2.2 to 2.3, the first mark is 2.21, the second is 2.22, and so on, until you get to 2.30 (which is the same as 2.3).

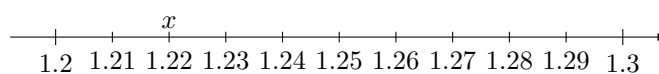


Ex: Find the value of x .



Answer:

- Each small division on the number line shows 0.01.



- So, $x = 1.22$