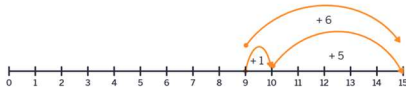


Subtraction: Shopkeeper's Addition

Shopkeeper's addition is a mental math technique used to calculate change. Instead of subtracting the purchase amount from the customer's money, the shopkeeper would "add up" the purchase amount to the amount tendered. Images created using free virtual manipulatives by Amplify are available at Polypad.com.

To subtract using shopkeeper's addition:

1. Rewrite the problem as a missing number addition calculation.
2. Use Cuisenaire rods to model the calculation. You may need to bridge through 10 to make the calculation easier.
3. Record it on a number line.
4. Write it as an equation.



Example: $15 - 9 =$

What do I need to add to nine to get 15?

$$9 + ? = 15$$



I add one to get to 10, then I add five more.



$$9 + 6 = 15,$$

or

$$15 - 9 = 6$$