



# Additive Thinking

## Parent Communication

This is **not** a test! These questions and example tasks are provided to give you insight into the importance of additive thinking in **mathematics**. Remember, we all come to the tasks with different levels of understanding. If you are using it with your child, both of you should focus on thinking and talking and comparing what you thought. Let your child respond first and listen carefully. You may be surprised by what they say or already know. Try to avoid statements like “No. That’s wrong. Here’s the answer.” Instead, ask questions like “What makes you think that?” and “Can you show me what you’re thinking?” Then turn the page over and look at the information on the back. Compare your thinking to what is explained here. What’s the same? What’s different? Did anything surprise you? **At home** activities are a chance to further explore your child’s understanding.

1. You purchase 2 items at the store. You buy a new coffee maker for \$63. Your total amount is \$105 before GST. How much did the second item cost?
  - a. Solve the question.
  - b. Are there other ways to solve this question?
2. Solve the following question:  $841 - 256$ 
  - a. Using subtraction
  - b. Using addition
3. True or False: Any subtraction question can be solved using an addition strategy.

**Big Idea 2: Addition is not just adding. It's subtraction too.**

**1. Solve the question**

- a. The answer is \$42.
- b. You could start at \$63 and add up until you reach \$105. You could start at \$105 and subtract \$63.

**At home,** create a pile of bills and coins. You need to know the total value. Ask your child to count out the bills to find their total. For example, there's \$15. Then, tell her that altogether you have \$21. Can she figure out how much money there is in coins? Afterwards, she can count the coins up to see if she was right. To avoid decimals, just use loonies and toonies. Hide them under a container or in a bag.

**2. Solve  $841 - 256$**

The answer is 585.

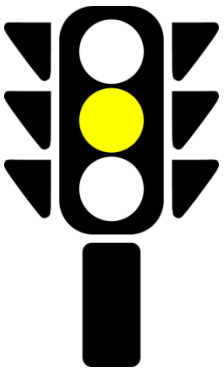
- a. You can watch a video demonstrating multiple ways of solving this question at <http://bit.ly/empl-ATBI2vid1>

**At home,** when the opportunity presents itself, ask your child to find answers using both addition and subtraction strategies.

**3. True or False?**

The answer is true. Any subtraction question can be solved using an addition strategy. However, whether your child chooses to add or subtract will depend on the context of the question and on their ability to add or subtract. Some numbers will work better to add while others will be easier to use subtraction. With time and experience, your child will develop the ability to choose addition or subtraction depending on the numbers involved in the question.

**At home,** examine questions and mathematical situations with your child and discuss when it's easier and/or faster to add or subtract.



Math education is changing in Alberta. Be open to the different ways math is taught. Research is still in progress about better ways of teaching and learning. Although the math classroom may look different than 30 years ago, it is about developing deep mathematical understanding. Check out this video created by Alberta Education entitled "My Child's Math – A Guide for Parents". <https://education.alberta.ca/media/464737/guide-for-parentssd.mp4>