1. Acme Builder’s Inc. has worked out that the wiring of an average house requires 45m of 14AWG wire. If a contractor has to wire 5 houses, what length of wire will be needed?
2. Burnaby Farms wants to estimate the cost of fertilizing their fields for the coming year. Each hectare of cultivated land requires 15kg and they intend to work 300 hectares.
3. Cherry Entertainment Corp. is looking into the profitability of hosting MMA XXII at the Rogers Center. The sale of tickets, broadcasting rights and advertising will gross approximately $2 million. How much profit will Cherry Entertainment Center make if Rogers Centre cost $800, 000?
4. Delta Airlines estimates that the fuel efficiency of a Boeing 747 jet is 12 liters per km. If the price of aviation fuel is $1 per liter, how much would it cost the airline to fly to New York and back from Toronto?
5. Estelle’s Grocery is having a back to school sale of up to 50% off on most food items. The price of potatoes is 11₵ per kg. A plastic bag costs 5₵. What will the total cost (potatoes and bag) if someone buys 25kg of potatoes?
6. **SOLVABLE -** Acme Builder’s Inc. has worked out that the wiring of an average house requires 45m of 14AWG wire. If a contractor has to wire 5 houses, what length of wire will be needed?

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| **IPO Chart** | | |
| **Input** | **Processing** | **Output** |
| * lengthPerHouse * numOfHouses | Assumptions:   1. All houses require the same type of wire. 2. The houses are the same average size   Processing Items:   * None   Algorithm:   1. Enter lengthPerHouse and numOfHouses 2. Calculate totalLength of the wire by multiplying lengthPerHouse by numOfHouses 3. Display totalLength | * totalLength |

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| **Sample Calculation / Desk-Checking Table** | | |
| lengthPerHouse [input] | numOfHouses [input] | totalLength [output] |
| 45m | 5 | 225m |