Chapter 3 Class 7 A Peek Beyond The Point - Case Based Question Worksheet 2 by teachoo

Chapter: Chapter 3 Class 7 Maths – A Peek Beyond Point

Name: _____

School: _____

Roll Number: _____

Case Study 1: The Weather Station Data

A weather station records the following data for a particular day: Maximum Temperature: 30.2°C, Minimum Temperature: 22.8°C, Total Rainfall: 12.8 mm .

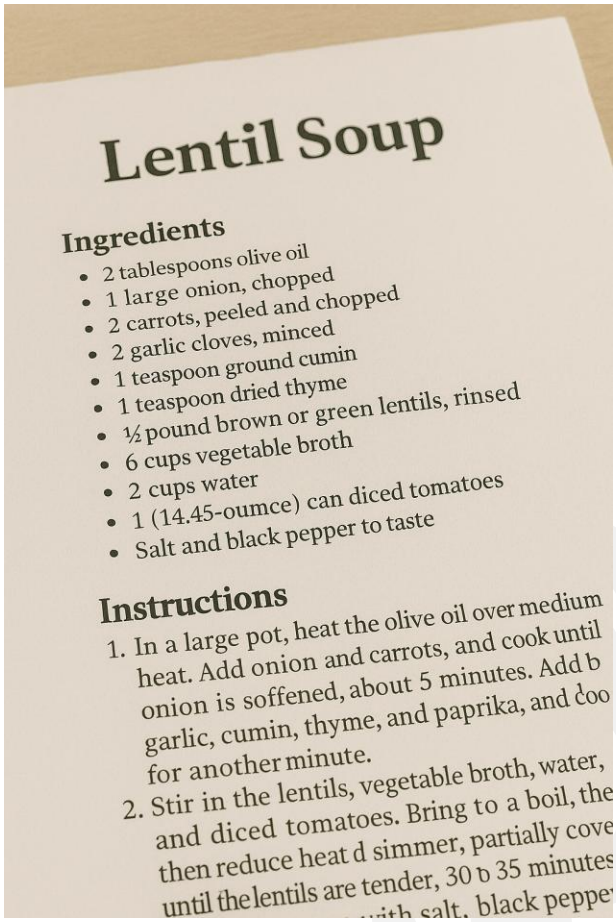
1. (1 Mark) What was the temperature range (difference between maximum and minimum) for the day?
2. (1 Mark) The total rainfall for the entire week was 50.5 mm . How much rain fell on the other six days of the week?
3. (1 Mark) The temperature at noon was 28.6°C. By evening, it had dropped by 4.2°C. What was the evening temperature?
4. (2 Marks) The average temperature for a day is often estimated by finding the value exactly halfway between the maximum and minimum. Calculate this estimated average temperature for the day.

Case Study 2: The Smartphone Repair

A technician is assembling a smartphone. The components have the following thicknesses: Screen: 1.15 mm , Battery: 3.8 mm , Back Cover: 0.7 mm .

1. (1 Mark) What is the combined thickness of the screen and the battery?
2. (1 Mark) What is the total thickness of all three components when assembled?
3. (1 Mark) The phone's frame can hold a maximum thickness of 5.7 mm . Will the components fit inside the frame?
4. (2 Marks) What is the clearance, or gap, between the assembled components and the frame's maximum capacity? Why is a small positive clearance important in engineering?

Case Study 3: The Recipe Scaling



Lentil Soup

Ingredients

- 2 tablespoons olive oil
- 1 large onion, chopped
- 2 carrots, peeled and chopped
- 2 garlic cloves, minced
- 1 teaspoon ground cumin
- 1 teaspoon dried thyme
- ½ pound brown or green lentils, rinsed
- 6 cups vegetable broth
- 2 cups water
- 1 (14.45-oumce) can diced tomatoes
- Salt and black pepper to taste

Instructions

1. In a large pot, heat the olive oil over medium heat. Add onion and carrots, and cook until onion is soffened, about 5 minutes. Add b garlic, cumin, thyme, and paprika, and ċoo for another minute.
2. Stir in the lentils, vegetable broth, water, and diced tomatoes. Bring to a boil, the then reduce heat d simmer, partially cove until the lentils are tender, 30 ъ 35 minutes

A recipe for a lentil soup that serves 4 people requires 0.25 kg of lentils and 0.05 kg of a special spice mix.

1. (1 Mark) How many kilograms of lentils are required per person?
2. (1 Mark) A chef wants to prepare this soup for a party of 10 people. How many kilograms of lentils will be needed?
3. (1 Mark) After preparing for the party, how much will be left from a new 1 kg bag of lentils?
4. (2 Marks) The chef only has 0.1 kg of the special spice mix. What is the maximum number of people they can make the soup for, based only on the amount of spice available? Explain your reasoning.

Important links

- Answer of this worksheet - https://www.teachoo.com/25619/5375/Case-Based-Questions---Worksheet-2/category/Teachoo-Questions---Case-Based/
- Full Chapter with Explanation, Activity, Worksheets and more – https://www.teachoo.com/subjects/cbse-maths/class-7/chapter-3-ganit-prakash/
- Science Class 7 – https://www.teachoo.com/subjects/science/class-7/
- Maths Class 7 - https://www.teachoo.com/subjects/cbse-maths/class-7/

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