Chapter 7: Rani's Gift

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Exercise 7.1 — Let us Do — Measure with Handspans

Q1 Use your handspan to measure the length of the following objects: Desk, Blackboard, Window. First write your estimated length, then measure and write the actual length.

SOLUTION

First guess (estimate) how many handspans each object might be.
Then place your hand flat and count how many times your handspan fits along the object.
Write both the estimated and actual number of handspans in the table.

Exercise 7.2 — Let us Do — Shortest Path

Q1 Kavita is going to school from her home and is getting late. Which path should she use to reach school fast? Mark it in the picture.

SOLUTION

Look at the map. Home (the hut) is on the left and school is on the right. Two roads are visible: one goes all the way around the outside of the park (longer), and one cuts through the middle more directly. Kavita should take the shorter road through the middle — it has fewer turns and less distance, so she reaches school faster.

Q2 Choose the longest path from A to B. Also make the shortest path between A and B.

SOLUTION

Three paths from A (top-left) to B (bottom-right) are shown on grids. Count the squares each path covers: Path 1 (left grid) goes right then straight down — short. Path 2 (middle grid) zigzags with one extra bend — medium length. Path 3 (right grid) takes the most turns going down, across, down — longest. The third (rightmost) path is the longest. The shortest path is the most direct diagonal-staircase route with the fewest turns (like Path 1).

Exercise 7.3 — How Many Blocks? — Height of Toys

Q1 Fill in the blanks. A. The giraffe is _____ blocks tall. B. The _____ is 7 blocks tall. C. The monkey is _____ blocks tall. D. The elephant is _____ blocks tall.

SOLUTION

Count the blocks stacked beside each toy in the picture. The tower has 10 blocks in total. A. The giraffe (tallest toy, reaches the very top) is 10 blocks tall. B. The camel is 7 blocks tall (given). C. The monkey (smallest toy, sits near the bottom) is 3 blocks tall. D. The elephant is 5 blocks tall.

Exercise 7.4 — Let us Do — Trace Your Hand

Q1 How long is your hand? Trace your hand in the space given and count the number of lines.

SOLUTION

Place your hand flat on the page with fingers together.

Trace the outline of your hand with a pencil.

Count the number of lines (grid lines or marks) that fit across the width of your traced hand to find its length.

Exercise 7.5 — Pumpkin's Chaupal — Compare Weights

Q1 Fill in the blanks using the picture of vegetables on the see-saw. A. Muskmelon is heavier than carrot. B. Capsicum is lighter than ___. C. ___ is heavier than ___. D. ___ is lighter than ___. E. ___ is the heaviest of all. F. ___ is the lightest of all.

SOLUTION

Use the clues given in the picture: Pumpkin is heavier than bottle gourd; Bottle gourd is lighter than cauliflower; Carrot is lighter than pumpkin; Muskmelon is heavier than carrot.

A. Muskmelon is heavier than carrot. (given)

B. Capsicum is lighter than cauliflower (cauliflower is heavier).

C. Pumpkin is heavier than bottle gourd. (one possible answer)

D. Carrot is lighter than muskmelon. (one possible answer)

E. Pumpkin (or watermelon) is the heaviest of all.

F. Carrot is the lightest of all.

B. Cauliflower; C. Pumpkin is heavier than bottle gourd; D. Carrot is lighter than muskmelon; E. Pumpkin/Watermelon; F. Carrot

Exercise 7.6 — Let us Do — Circle Heaviest and Lightest

Q1 Circle the heaviest one in each group (A and B).

SOLUTION

Look at the objects in each group. A. The three objects are a crayon, a notebook, and a school bag — the school bag is the heaviest (it is big and carries books). Circle the school bag. B. The three objects are a bag of oranges, a bucket, and a box of crayons — the bucket (full, made of heavy material) is the heaviest. Circle the bucket.

Q2 Circle the lightest one in each group (A and B).

SOLUTION

Look at the objects in each group. A. The three objects are a doll, a gift box, and a matchbox — the matchbox is the lightest (very small and nearly empty). Circle the matchbox. B. The three objects are a ball, a matchbox, and a balloon — the balloon is the lightest (filled with only air). Circle the balloon.

Exercise 7.7 — Let us Think — Balance Scale

Q1 Tick the vegetables and fruits which will make the balance go down. Mark Light (L) and Heavy (H) for each group (A, B, C, D).

SOLUTION

The balance scale tips DOWN on the heavier side. A. Pumpkin (left) vs Potato (right): pumpkin is heavier — tick the pumpkin, mark it H; mark potato L. B. Orange (left) vs Watermelon (right): watermelon is heavier — tick the watermelon, mark it H; mark orange L. C. Coconut (left) vs Mango (right): mango is heavier — tick the mango, mark it H; mark coconut L. D. Apple (left) vs Green chilli (right): apple is heavier — tick the apple, mark it H; mark green chilli L.

Exercise 7.8 — Fruits in the Park — Mango and Coconut Balance

Q1 A. How many mangoes will balance the watermelon? Find out from the picture.

SOLUTION

Look at the see-saw picture. The watermelon sits on the left. On the right, the mangoes are piled in a basket. Count the mangoes in the basket: there are 6 mangoes. So 6 mangoes will balance 1 watermelon.

Q2 B. How many coconuts can balance the watermelon if the weight of 1 coconut equals the weight of 2 mangoes?

SOLUTION

From the picture: 6 mangoes balance the watermelon. We are told 1 coconut = 2 mangoes. So coconuts needed = 6 ÷ 2 = 3. Answer: 3 coconuts will balance the watermelon.

Exercise 7.9 — Let us Make Nimbu Pani — Scaling a Recipe

Q1 Raghu uses the following for 1 glass of nimbu pani: Water = 1 glass, Sugar = 1 spoon, Lemon juice = 2 spoons, Salt = a pinch. He wants to make 3 glasses. Write the quantity of each ingredient needed for 3 glasses.

SOLUTION

For 3 glasses, multiply each ingredient by 3.
Water: 1 × 3 = 3 glasses
Sugar: 1 × 3 = 3 spoons
Lemon juice: 2 × 3 = 6 spoons
Salt: 1 × 3 = 3 pinches
Water: 3 glasses; Sugar: 3 spoons; Lemon juice: 6 spoons; Salt: 3 pinches

Exercise 7.10 — Find Out — Raghu's Bottle Capacity

Q1 Raghu's bottle is filled with 4 glasses of water. A. How many glasses of water can fill your bottle? B. How many glasses of water can fill your friend's bottle? C. Does your friend's bottle fill with equal, more, or less amount of water than yours?

SOLUTION

This is an activity — fill your own bottle with a glass and count how many glassfuls it takes.

A. Fill your bottle glass by glass and count. Write the number.

B. Ask your friend to do the same with their bottle and write their number.

C. Compare the two numbers: if they are the same, write 'equal'; if your friend's number is bigger, write 'more'; if smaller, write 'less'.

Q2 Name the friend whose bottle can carry: A. Equal water as yours. B. Less water than yours. C. More water than yours.

SOLUTION

After doing the bottle-filling activity with your friends, compare results.

A. A friend whose bottle takes the same number of glasses as yours — write their name.

B. A friend whose bottle takes fewer glasses — write their name.

C. A friend whose bottle takes more glasses — write their name.