

Problem Solving and Reasoning

While in Wonderland, Alice drank a potion and everything shrank. All the items around her became ten times smaller! Are these measurements correct?

Item	Original measurement	After shrinking
Height of a door	220 cm	2,200 cm
Her height	160 cm	16 cm
Length of a book	340 mm	43 mm
Height of a mug	220 mm	?

Can you fill in the missing measurement?

Can you explain what Alice did wrong?

Write a calculation to help you explain each item.

Item	Original measurement	After shrinking
Height of a door	220 cm	
Her height	160 cm	
Length of a book	340 mm	
Height of a mug	220 mm	