| | Using | a Shortcut |
|---------------|--|--|
| A. Choos | se the correct answer: | |
| 1. The | shortcut formula to find the | volume of a cuboid is |
| a) le | ength + breadth + height | b) length × breadth × height |
| c) 2 | × (length + breadth + height) | d) side × 4 |
| 2. The | volume of a cube with side 5 | is cm is |
| a) 2 | 5 cm ³ | b) 50 cm³ |
| c) 1 | 25 cm ³ | d) 15 cm³ |
| 3. Wh | at is the volume of a cuboid v | vith dimensions 6 cm × 3 cm × 2 cm |
| a) 1 | 2 cm ³ | b) 18 cm³ |
| c) 3 | 6 cm ³ | d) 72 cm³ |
| 4. Vol | ume of a cube can be calculat | ed quickly using |
| a) s | ide × side | b) side × side × side |
| c) le | ength × height | d) height × breadth |
| 5. If a me | cuboid has length 4 cm but thod gives volume as | readth 2 cm and height 5 cm the short |
| a) 2 | 0 cm ³ | b) 40 cm³ |
| c) 1 | 0 cm³ | d) 11 cm³ |
| B. Write | Write the Missing Terms to Complete the Sentences: | |
| 1. Sho | rtcut formula for the volume of | of a cube is |
| 2. Sho | 2. Shortcut formula for the volume of a cuboid is | |
| 3. A cı | ube with side 6 cm has volume | e cm ³ |
| 4. A ci | uboid with dimensions 10 cm > | × 5 cm × 3 cm has volume cm ³ |
| 5. Sho | rtcut helps in finding the volu | me |
| C. Mark | each sentence with a True | (✔) or False (X): |
| 1 Vol | umo of cubo – cido x cido x cid | |
| 1. 001 | unie of cube – side × side × sid | |

- 3. Volume is measured in cm²
- 4. A cube with side 10 cm has a volume of 1000 cm³
- 5. A shortcut is not useful for larger numbers

D. Figure out the answers to these questions:

- 1. Use the shortcut method to find the volume of a cube with side 8 cm.
- 2. A cuboid has length 7 cm breadth 6 cm and height 4 cm Use shortcut to find volume.
- 3. Find the volume of a cube if volume is 343 cm³ What is the length of one side.
- 4. A box has volume 240 cm³ If its base area is 30 cm² use shortcut to find height.
- 5. Compare the volume of a cube of side 9 cm and a cuboid of dimensions 9 cm × 9 cm × 1 cm.

E. Challenge yourself with these questions:

- 1. Find the volume of a cuboid with length 11 cm breadth 5 cm height 2 cm using shortcut.
- 2. A cube of side 12 cm has volume equal to that of a cuboid Find dimensions of cuboid if base area is 144 cm².
- 3. A toy box is in cuboid shape with volume 720 cm³ Its height is 8 cm Find the base area using shortcut.
- 4. Use the shortcut method to compare the volume of two cubes one of side 7 cm and the other of side 9 cm.
- 5. A milk carton has a length of 10 cm breadth of 4 cm and height of 25 cm Find its volume quickly using shortcut.