



Perimeter, Area, and Surface Area

Name: _____

Date: _____

Grade: Grade 5

Part A: Multiple Choice

Circle the best answer for each question.

1. A storage bin is 1.5 ft by 2 ft by 3 ft. What is its volume?

- A) 9 cubic feet
- B) 6.5 cubic feet
- C) 4.5 cubic feet
- D) 12 cubic feet

2. Which prism has greater surface area: A (2 by 2 by 8) or B (2 by 4 by 4)?

- A) A and B equal at 64 sq units
- B) Prism A has more, 72 vs 64
- C) They differ by 100 square units
- D) Prism B has more, 64 vs 72

3. A cube with side 0.4 m has volume closest to which value?

- A) 0.16 cubic meters
- B) 0.4 cubic meters
- C) 0.064 cubic meters
- D) 1.2 cubic meters

4. A 2 by 2 by 2 ft box sits inside a 3 by 3 by 3 ft box. Empty volume between them is?

- A) 1 cubic foot only
- B) 8 cubic feet
- C) 27 cubic feet exactly
- D) 19 cubic feet

Part B: Fill in the Blank

Write the correct answer on each line.

1. A prism with length 2.5, width 4, and height 6 has volume _____ cubic units.
2. A cube with side one third yard has volume _____ cubic yards (write fraction).
3. Painting 4 of 6 faces of a 5 by 5 by 5 ft cube covers _____ square feet.
4. A prism 3 by 4 by 5 has surface area $2(12+15+20)$ equals _____ square units.
5. A nested 1 by 2 by 3 ft box inside a 3 by 4 by 5 ft box leaves _____ cubic feet empty.

Part A: Multiple Choice

Circle the best answer for each question.

1. A storage bin is 1.5 ft by 2 ft by 3 ft. What is its volume?

- A) 9 cubic feet
- B) 6.5 cubic feet
- C) 4.5 cubic feet
- D) 12 cubic feet

2. Which prism has greater surface area: A (2 by 2 by 8) or B (2 by 4 by 4)?

- A) A and B equal at 64 sq units
- B) Prism A has more, 72 vs 64
- C) They differ by 100 square units
- D) Prism B has more, 64 vs 72

3. A cube with side 0.4 m has volume closest to which value?

- A) 0.16 cubic meters
- B) 0.4 cubic meters
- C) 0.064 cubic meters
- D) 1.2 cubic meters

4. A 2 by 2 by 2 ft box sits inside a 3 by 3 by 3 ft box. Empty volume between them is?

- A) 1 cubic foot only
- B) 8 cubic feet
- C) 27 cubic feet exactly
- D) 19 cubic feet

Part B: Fill in the Blank

Write the correct answer on each line.

1. A prism with length 2.5, width 4, and height 6 has volume 60 cubic units.
2. A cube with side one third yard has volume 1/27 cubic yards (write fraction).
3. Painting 4 of 6 faces of a 5 by 5 by 5 ft cube covers 100 square feet.
4. A prism 3 by 4 by 5 has surface area $2(12+15+20)$ equals 94 square units.
5. A nested 1 by 2 by 3 ft box inside a 3 by 4 by 5 ft box leaves 54 cubic feet empty.