Name: _____

Volume and Surface Area of Prisms Word Problems

Solve each problem.

1. A triangular prism has a triangle base with base 12 cm and height 7 cm. The prism is 5 cm long. What is its volume?

Answer: _____

2. A triangular prism has right-triangle bases with sides 5, 12 and 13 in. It is 9 in long. What is its surface area?

Answer: _____

3. A rectangular prism has a volume of 36 cubic ft. Its base is 6 ft by 2 ft. What is its height?

Answer: _____

4. A tent is a triangular prism. The triangle has base 8 ft and height 8 ft, and the tent is 9 ft long. How much space is inside?

Answer: _____

5. What is the surface area of a box that is 9 in by 3 in by 8 in?

Answer: _____

6. A triangular prism has a triangle base with base 12 cm and height 5 cm. The prism is 8 cm long. What is its volume?

Answer: _____

7. A triangular prism has right-triangle bases with sides 3, 4 and 5 in. It is 7 in long. What is its surface area?

Answer: _____

8. A rectangular prism has a volume of 216 cubic ft. Its base is 9 ft by 6 ft. What is its height?

Answer: _____

9. A tent is a triangular prism. The triangle has base 9 ft and height 6 ft, and the tent is 11 ft long. How much space is inside?

Answer: _____

10. What is the surface area of a box that is 8 in by 3 in by 6 in?

Answer: _____

Name: **ANSWER KEY**

Volume and Surface Area of Prisms Word Problems

Solve each problem.

1. A triangular prism has a triangle base with base 12 cm and height 7 cm. The prism is 5 cm long. What is its volume?

Answer: 210 cubic cm

2. A triangular prism has right-triangle bases with sides 5, 12 and 13 in. It is 9 in long. What is its surface area?

Answer: 330 sq in

3. A rectangular prism has a volume of 36 cubic ft. Its base is 6 ft by 2 ft. What is its height?

Answer: 3 ft

4. A tent is a triangular prism. The triangle has base 8 ft and height 8 ft, and the tent is 9 ft long. How much space is inside?

Answer: 288 cubic ft

5. What is the surface area of a box that is 9 in by 3 in by 8 in?

Answer: 246 sq in

6. A triangular prism has a triangle base with base 12 cm and height 5 cm. The prism is 8 cm long. What is its volume?

Answer: 240 cubic cm

7. A triangular prism has right-triangle bases with sides 3, 4 and 5 in. It is 7 in long. What is its surface area?

Answer: 96 sq in

8. A rectangular prism has a volume of 216 cubic ft. Its base is 9 ft by 6 ft. What is its height?

Answer: 4 ft

9. A tent is a triangular prism. The triangle has base 9 ft and height 6 ft, and the tent is 11 ft long. How much space is inside?

Answer: 297 cubic ft

10. What is the surface area of a box that is 8 in by 3 in by 6 in?

Answer: 180 sq in