

Word problem involving the volume of a triangular prism: Worksheet 10.3

Name Date Score

1. The height of a triangular prism is 10 cm. and its base is an equilateral triangle of side 5 cm. Find the volume of the prism.
2. A right prism stands on a base which is a right triangle with legs 3 cm and 4 cm. Find the volume of the prism if its height is 8 cm.
3. The base of a right prism is a right triangle with legs 6 and 8 cm. If the volume of the prism be 216 cu cm, find the height of the prism.
4. The base of a right prism is a triangle with base 12 cm and height 6 cm. Find the volume of the prism if its height is 5 cm.
5. The height of a triangular prism is 8 cm. and its base is an equilateral triangle of side 3 cm. Find the volume of the prism.
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6. The height of a right prism is 12 cm and its base is a triangle with 7 cm as base and height 5 cm. Find the volume of the prism.
7. The base of a right prism is a right triangle with legs 12 and 5 cm. If the volume of the prism be 240 cu cm, find the height of the prism.
8. A right prism base is a triangle whose sides are 6 cm, 8 cm and 10 cm. Find the volume of the prism if its height is 16 cm.
9. The height of a right prism is 15 cm. and its base is a triangle. If the volume of the prism is 150 cu cm, find the area of the base triangle.
10. A right prism base is a triangle whose sides are 18 cm, 20 cm and 34 cm. Find the volume of the prism if its height is 9 cm.



Solutions: Worksheet 10.3

1. Volume of triangular prism = 108.13 cu cm
2. Volume of triangular prism = 48 cu cm
3. Height of triangular prism = 9 cm
4. Volume of triangular prism = 180 cu cm
5. Volume of triangular prism = 31.14 cu cm
6. Volume of triangular prism = 210 cu cm
7. Height of the triangular prism = 8 cm
8. Volume of triangular prism = 384 cu cm
9. Area of the base triangle = 10 square cm
10. Volume of triangular prism = 1296 cu cm

