

# Word problem involving the volume of a triangular prism: Worksheet 10.2

Name ..... Date ..... Score .....

1. The height of a triangular prism is 7 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 7 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 168 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 8 cm.
5. The height of a triangular prism is 8 cm and its base is an equilateral triangle of side 5 cm. Find the volume of the prism.
6. The height of a right prism is 12 cm and its base is a triangle with 8 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 330 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 15 cm.
9. The height of a right prism is 15 cm. and its base is a triangle. If the volume of the prism is 165 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 8 cm.



## Solutions: Worksheet 10.2

1. Volume of triangular prism = 75.69 cu cm
2. Volume of triangular prism = 42 cu cm
3. Height of the triangular prism = 7 cm
4. Volume of triangular prism = 288 cu cm
5. Volume of triangular prism = 86.5 cu cm
6. Volume of triangular prism = 240 cu cm
7. Height of the triangular prism = 11 cm
8. Volume of triangular prism = 360 cu cm
9. Area of base triangle = 11 square cm
10. Volume of triangular prism = 1152 cu cm

