

MCAS Archive Questions

10.G.4

2007, Mathematics - Grade 10
Question 16: Short-Answer
Reporting Category: Geometry
Standard: 10.G.4



Dan made an accurate scale drawing of the front of a building.

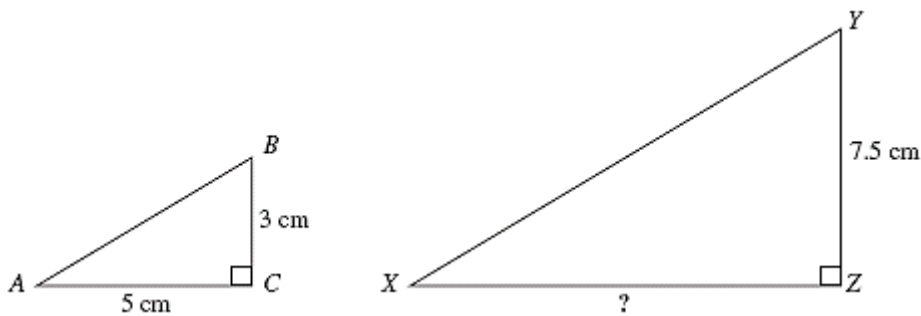
- The width of the building in Dan's scale drawing is 5 inches.
- The height of the building in his scale drawing is 3 inches.

If the actual width of the building is 100 feet, what is the actual height, in feet, of the building?

2004, Mathematics - Grade 10
Question 25: Multiple-Choice
Reporting Category: Geometry
Standard: 10.G.4



In the figures shown below, $\triangle ABC$ is similar to $\triangle XYZ$.



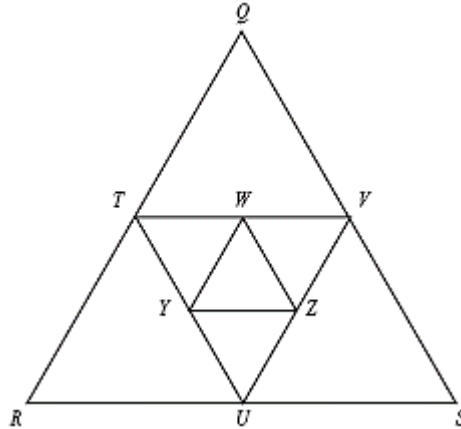
What is the length of \overline{XZ} ?

- A. 2.0 cm
- B. 4.5 cm
- C. 12.5 cm
- D. 22.5 cm

2003, Mathematics - Grade 10
Question 9: Multiple-Choice
Reporting Category: Geometry
Standard: 10.G.4



In the figure shown below, triangle TUV is formed by joining the midpoints of the sides of equilateral triangle QRS . Triangle WYZ is formed by joining the midpoints of the sides of triangle TUV .



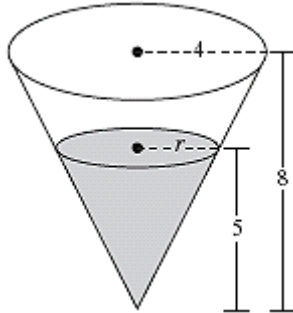
If the area of triangle QRS is 64 square inches, what is the area of triangle WYZ ?

- A. 1 square inch
- B. 4 square inches
- C. 8 square inches
- D. 16 square inches

2003, Mathematics - Grade 10
Question 40: Multiple-Choice
Reporting Category: Geometry
Standard: 10.G.4



A cup in the shape of a cone has a height of 8 units and a radius of 4 units as shown in the figure below. The water in the cup reaches a height of 5 units.



What is the value of r , the radius of the surface of the water?

- A. 1.6 units
- B. 2.5 units
- C. 6.4 units
- D. 10.0 units