

Geo Chapter 8 Review – Triangles

Name:

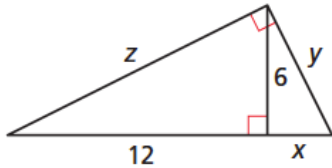
Per:

Vocab: angle of depression, angle of elevation, cosine, sine, tangent, trigonometric ratio

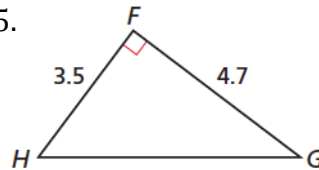
Problems 1 and 2:

Use triangle similarity to find x , y , & z .

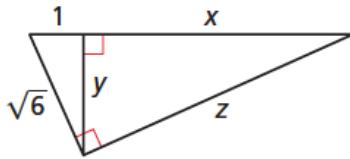
1.



5.



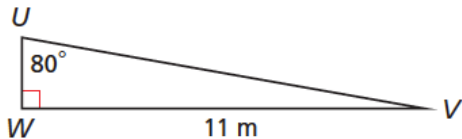
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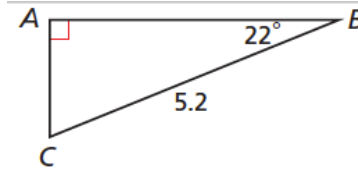
Problems 3 - 6:

Solve the triangle: find each missing length and angle

3.

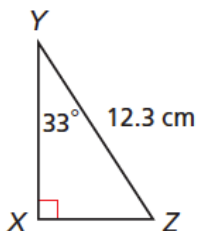


6.



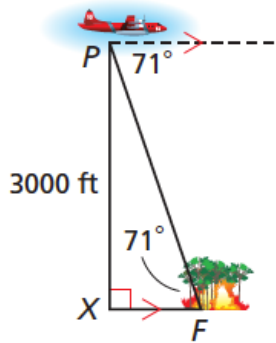
7. When the angle of elevation to the sun is 82° , a monument casts a shadow that is 5.1 ft long. What is the height of the monument to the nearest foot?

4.

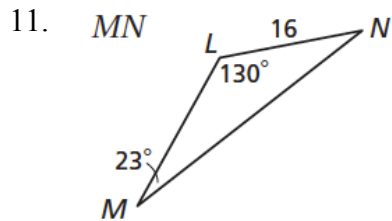
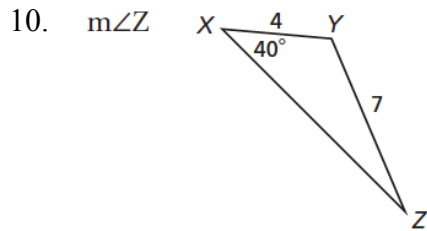


8. A ranger in a lookout tower spots a fire in the distance. The angle of depression to the fire is 4° , and the lookout tower is 32 m tall. What is the horizontal distance to the fire? Round to the nearest meter.

9. A pilot in a plane spots a forest fire on the ground at an angle of depression of 71° . The plane's altitude is 3000 ft. What is the horizontal distance from the plane to the fire? Round to the nearest foot.



Problems 10-11:
Use the law of sines to find the following:



Problems 12-13:
Use the law of cosines to find the following:

