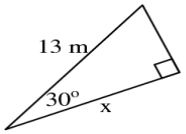
Review for Right Triangle Trigonometry

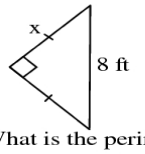
MA2G1. Students will identify and use special right triangles.

1. Find the measure of the indicated missing information for the following figures:

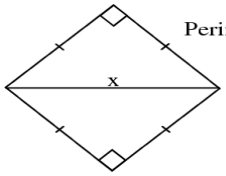
a.



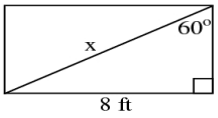
b.



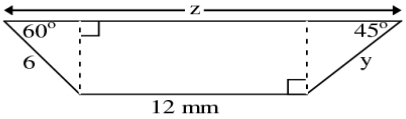
c. Perimeter = 32 in



d.



e. What is the perimeter?



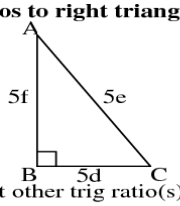
2. Solve the following:

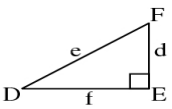
   a. The altitude of an equilateral triangle is 24 miles. Find the perimeter of the triangle.
   b. The area of a square is 32 in^2. Find the length of the diagonal.
   c. The perimeter of an equilateral triangle is 51 meters. Find the length of the altitude.

MA2G2. Students will define and apply sine, cosine, and tangent ratios to right triangles.

3. Given the following two triangles finish the statements:

   a. Sin A in the first triangle = Cos ___ in the second triangle.
   b. Cos D in the second triangle = Sin ___ in the first triangle.

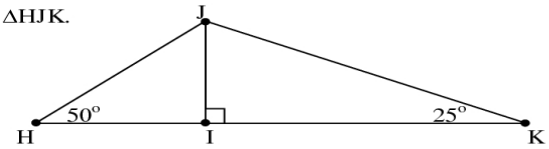




4. Given a right triangle ABC where ∠C is 90°, Sin A is the same as what other trig ratio(s)?

5. Given an isosceles right triangle ABC where ∠C is 90°, Cos B is the same as what other trig ratio(s)?

6. If the length of IJ is 47ft, find the perimeter of ΔHJK.
   Round your answer to the nearest tenth.



7. In ΔABC where ∠C is 90°, if Tan A= $\frac{1}{2}$, then Sin A= ___, Sin B = ___, Cos A= ___, Cos B = ___

8. Solve ΔABC from #7.

MA2G2.c Students will solve application problems using the trigonometric ratios.