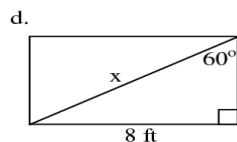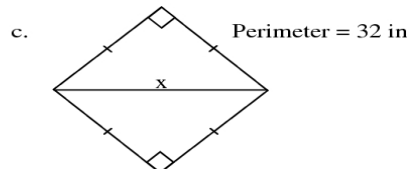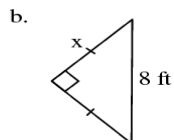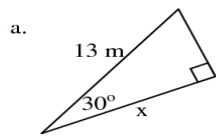Review for Right Triangle Trigonometry

MA2G1. **Students will identify and use special right triangles.**

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

a.
13 m
30°
x

b.
x
8 ft

c.
Perimeter = 32 in
x

d.
60°
x
8 ft

e. What is the perimeter?
z
60°
6
45°
y
12 mm
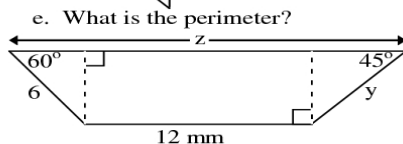
2. Solve the following:

   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.**

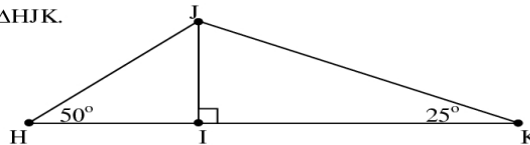3. Given the following two triangles finish the statements:

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

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

A
5f
5e
B
5d
C

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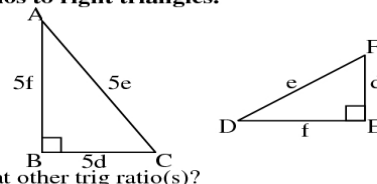
4. Given a right triangle ABC where ∠C is 90°, Sin A is the same as what other trig ratio(s)?

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.

J
50°
25°
H
I
K

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.**