Name _____
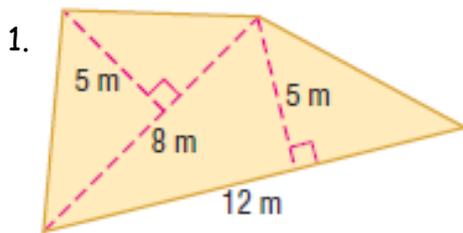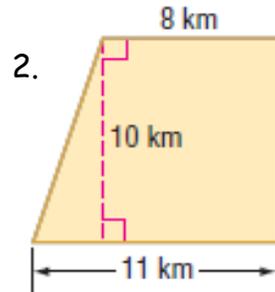
Area of Triangles, Trapezoids, and Rhombi
Worksheet

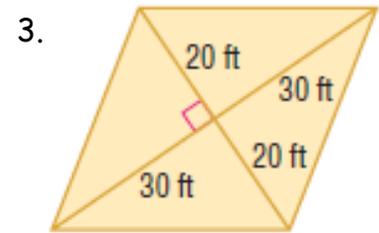For #1-3, find the area of each figure. Round to the nearest tenth if necessary.
Show all work.

1.

5 m
5 m
8 m
12 m

Area = _____

2.

8 km
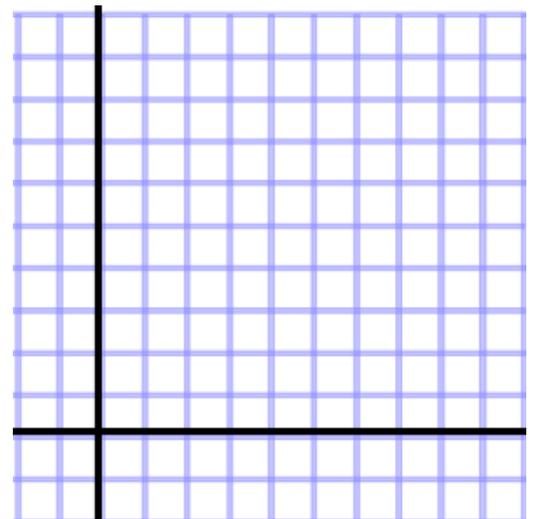10 km
11 km

Area = _____

3.

20 ft
30 ft
20 ft
30 ft

Area = _____

4. Find the area for the trapezoid PQRT given the coordinates of the vertices.
    Round to the nearest tenth if necessary. Show all work.

P(0,3), Q(3,7), R(5,7), T(6,3)

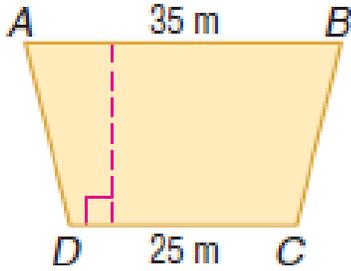Area = _____

Name _____

5. Find the height of trapezoid ABCD.
   Area = 750 m^2.

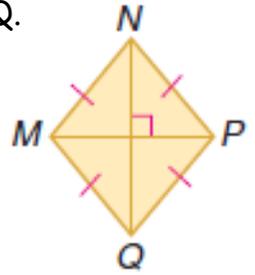   Height = _____

A   35 m   B

D   25 m   C

6. If MP is 25 inches, find NQ.
   Area = 375 in^2.

   NQ = _____

N

M   P

Q

7. Find the length of the base. Area = 248 in^2.

   Base = _____

X

16 in.

W   Y

Name _____
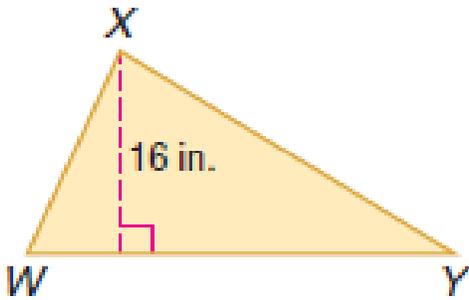
For #8-10, find the area of each figure. Draw and label the diagram. Show all work.

8. A rhombus with a perimeter of 20 meters and a diagonal of 8 meters.

   Area = _____

9. An isosceles trapezoid with a perimeter of 52 yards. The measure of one base is 10 yards greater than the measure of the other base. The measure of each leg is 3 yards less than twice the length of the shorter base. Find the measure of each side and the area of the trapezoid..
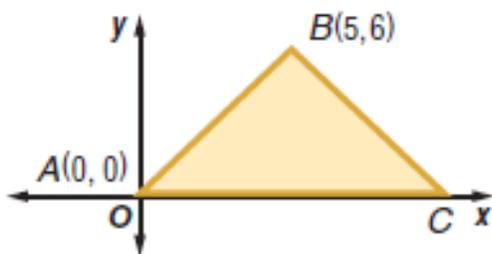
   Area = _____

10. A scalene triangle with sides that measure 34.0 cm, 81.6 cm, and 88.4 cm.

    Area = _____

11. In the figure, point B lies on the perpendicular bisector of $\overline{AC}$, what is the area of $\triangle ABC$?
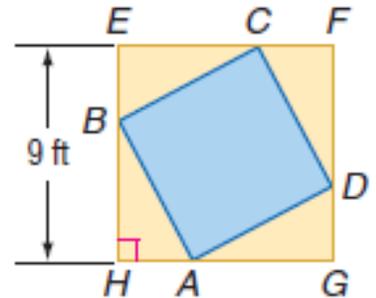
    Area = _____

Name _____

12. Carolyn has enough topsoil to cover 200 square feet. Her garden is shaped like a rhombus with one diagonal that is 25 feet in length. If she uses all of the topsoil on the garden, what is the length of the other diagonal? Draw and label the picture. Show all work.

   Length = _____

13. The vertices of quadrilateral ABCD intersect the square EFGH and divide its sides into segments with measures that have a ratio of 1:2. Find the area of ABCD. Describe the relationship between the area of ABCD and EFGH.

   Area of ABCD = _____

14. The lengths of the bases of an isosceles trapezoid are 19 cm and 35 cm. If the perimeter is 74 centimeters, what is the area? Draw and label the trapezoid. Show all work.

   Area = _____