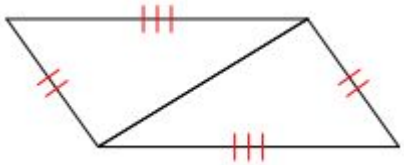
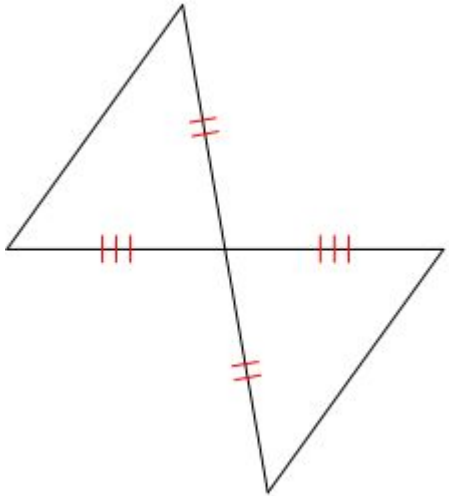
Congruent Triangles

How can we prove two triangles are congruent?

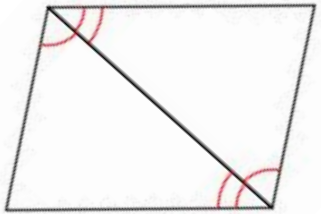
A



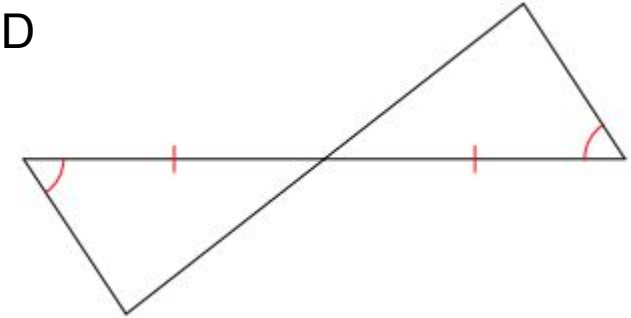
B



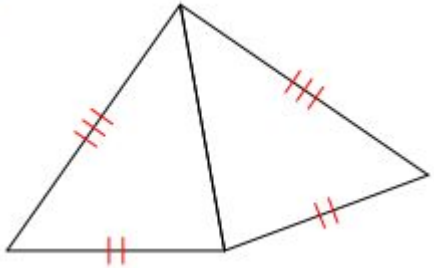
C



D



E



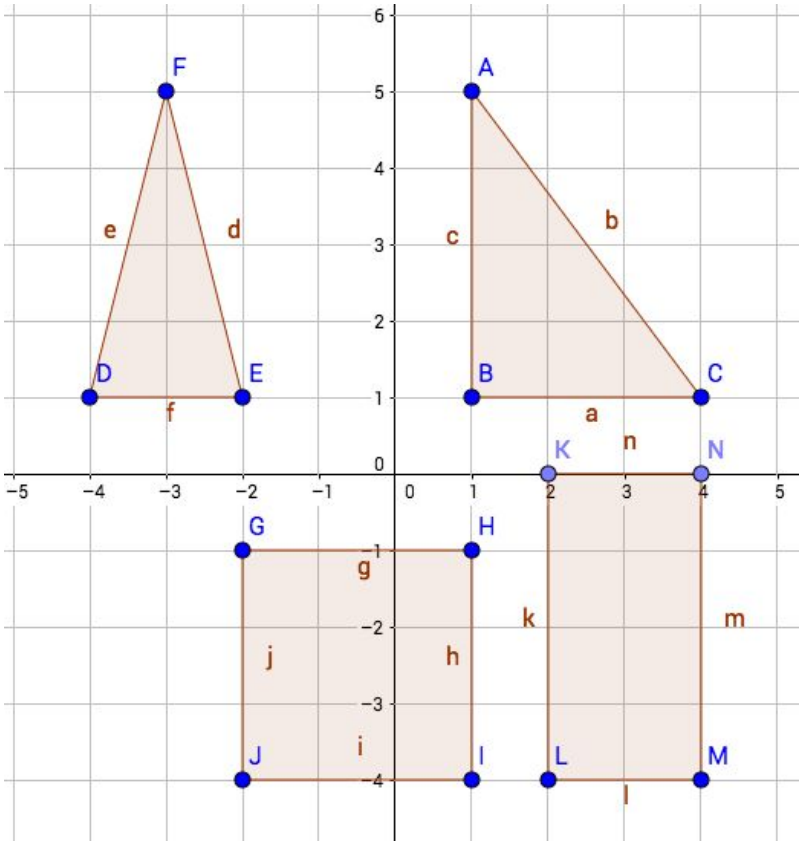
Draw and find the area and perimeter of the following shapes:

Rectangle

Square

Right Triangle

Isosceles Triangle



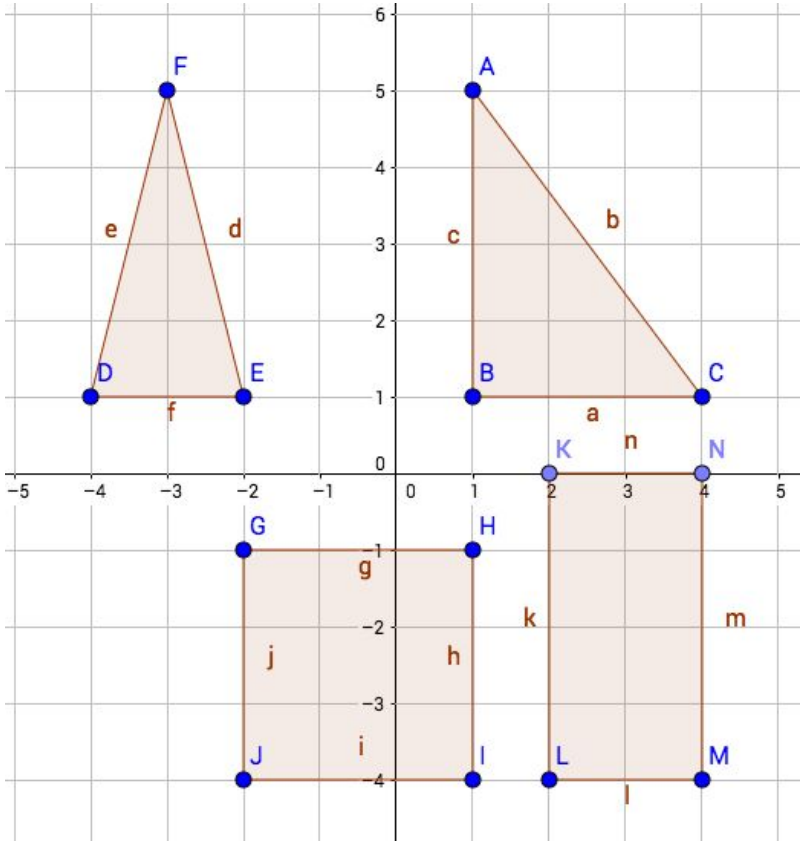
Area Formulas:

Rectangle:

Square:

Right Triangle:

Isosceles Triangle:

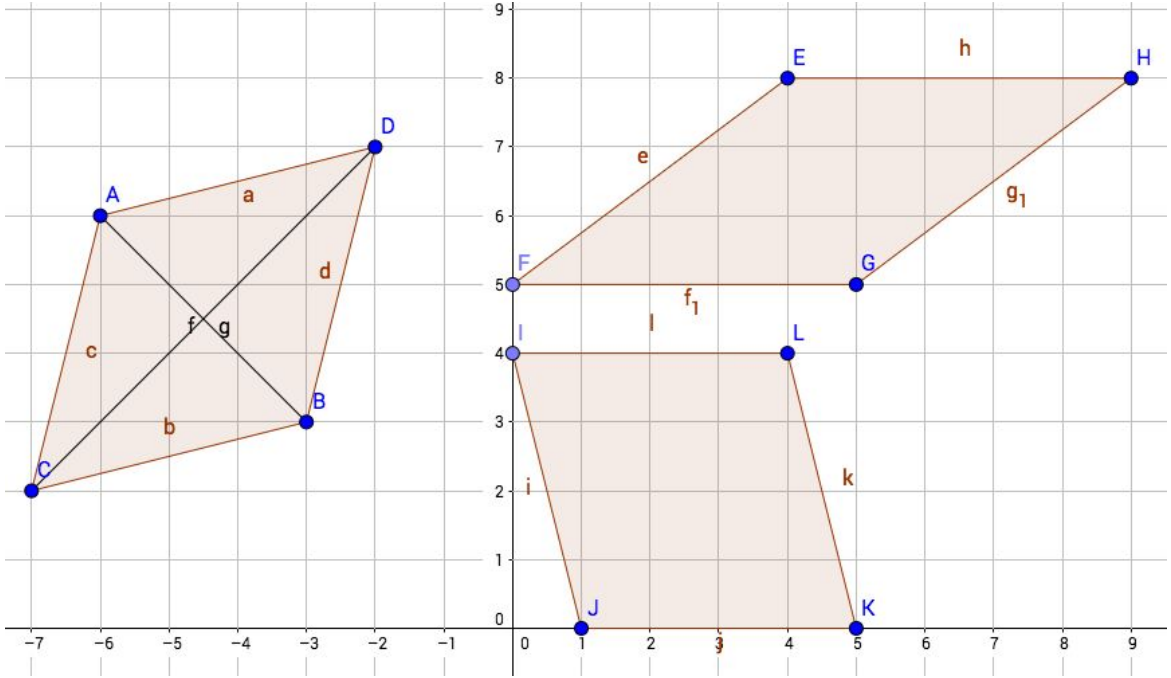


How can we find the area of the following shapes? Can we prove this?

Parallelogram:

Rhombus:

Find the Area and Perimeter:

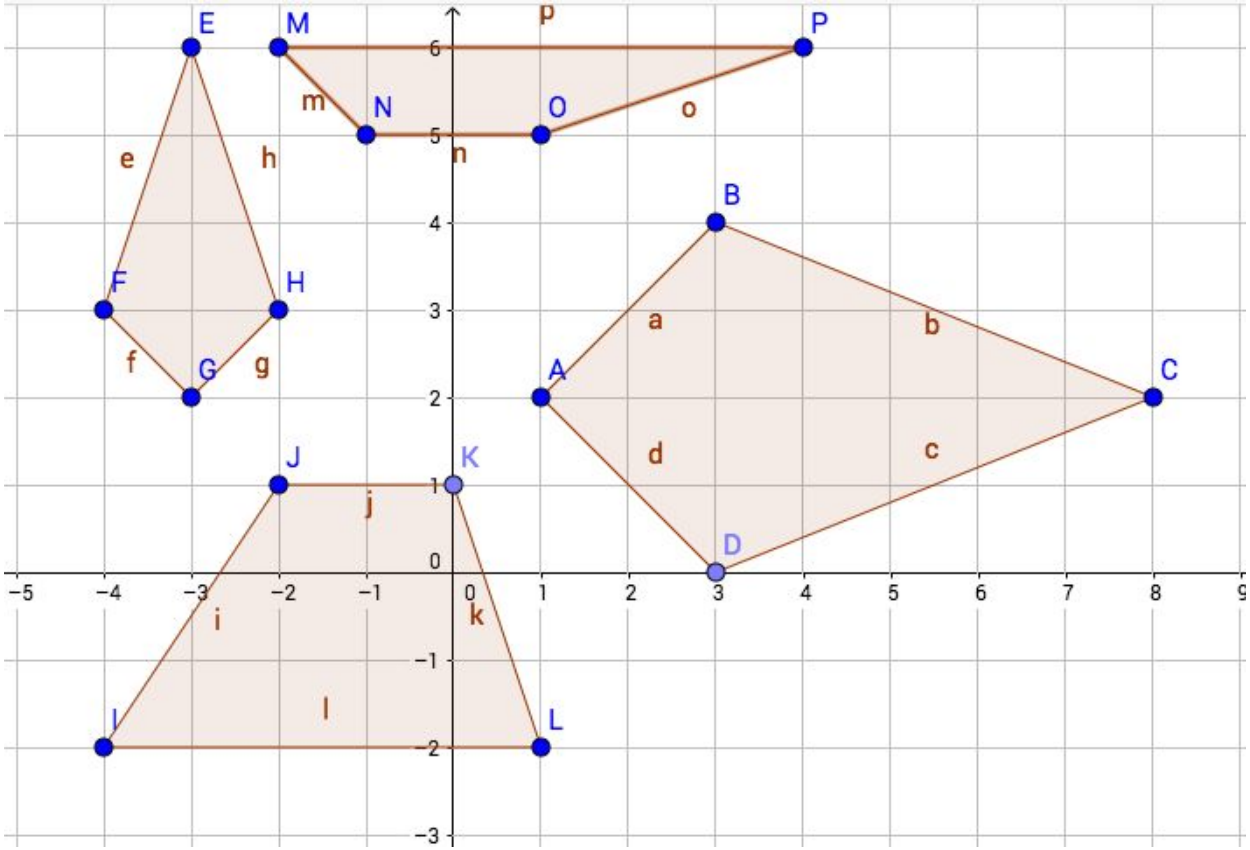


How can we find the area of the following shapes? Can we prove this?

Trapezoid:

Kite:

Find the Area and Perimeter:



A parallelogram has an area of 153 square inches and a height of 17 inches. What is the length of the base?

The area of a kite is 80 square meters. One diagonal is 4 times as long as the other. Find the diagonal lengths.

The height of a trapezoid is 3 centimeters. One base is twice the length of the other base. The area is 13.5 square centimeters. What is the length of each of the bases?

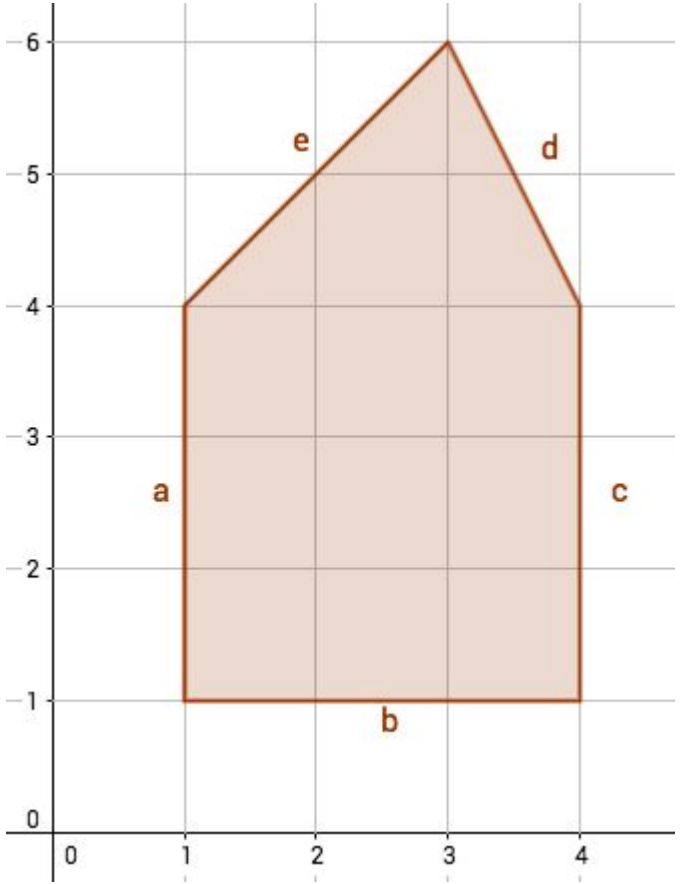
Postulate 25: **Area Congruence Postulate**

If two polygons are congruent, then they have the same area.

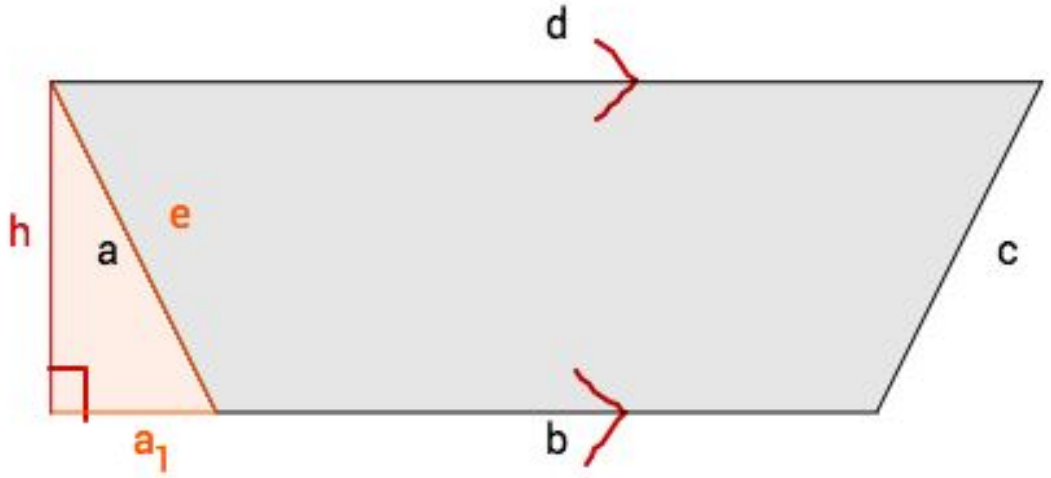
Postulate 26: **Area Addition Postulate**

The area of a region is the sum of the areas of its non overlapping parts

Find the area and perimeter of this polygon

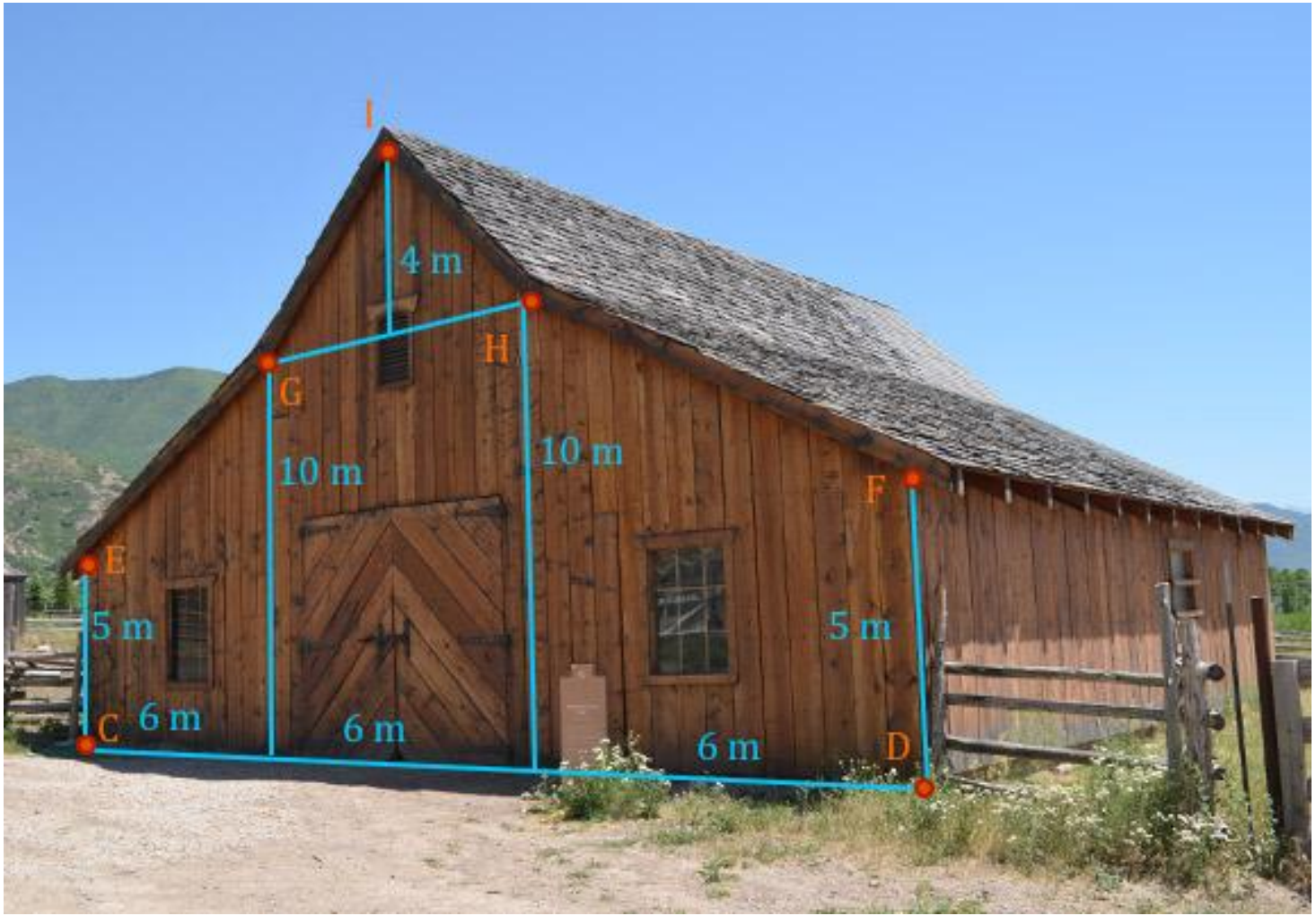


Find the value of h.



b = 14 cm
d = 22 cm
Area = 108 cm squared

Find h


I
4 m
H
G
10 m
10 m
F
E
5 m
5 m
C
6 m
6 m
6 m
D

Find the area and perimeter of the front of this barn.