Name _____

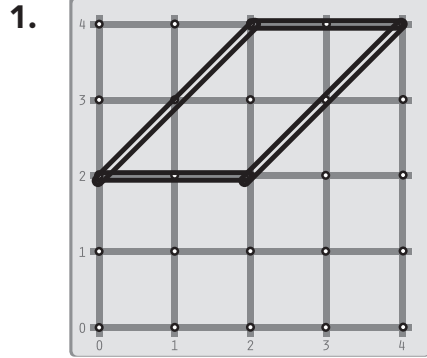**Use a Geoboard to model each parallelogram. Find its area.**
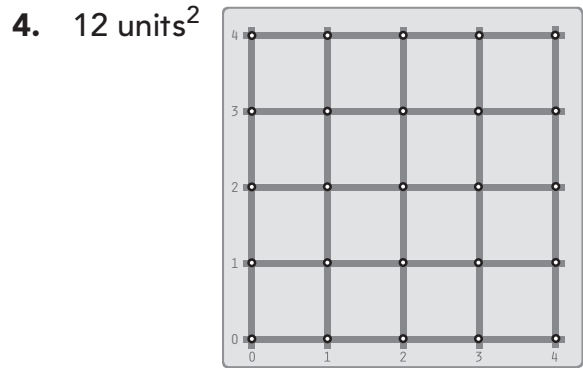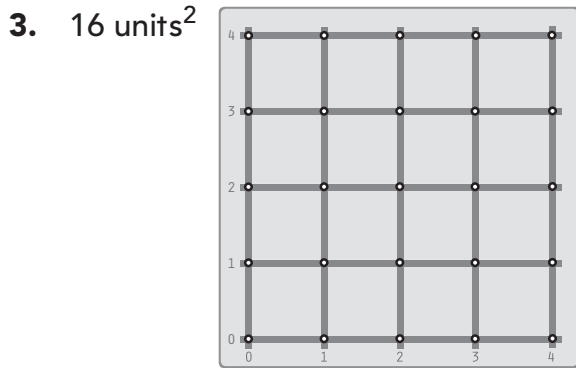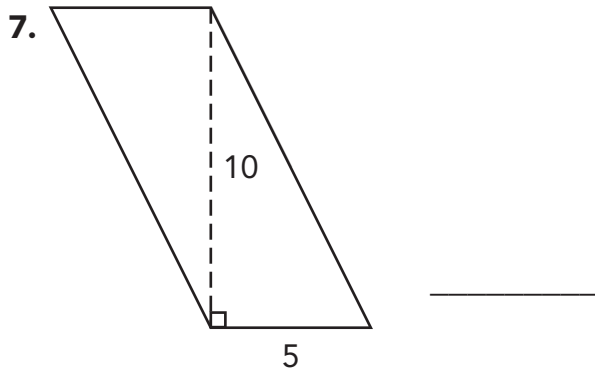
1.

2.
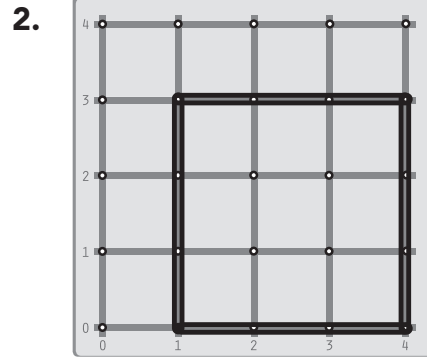
_____ square units

_____ square units

Using a Geoboard, model a parallelogram with the given area. Sketch the shape.

3. 16 units^2

4. 12 units^2

Find the area of each parallelogram.

5.

9

5 4

_____

6.

8

6

_____

7.

10

5

_____

8.

4

2

_____

© ETA hand2mind™
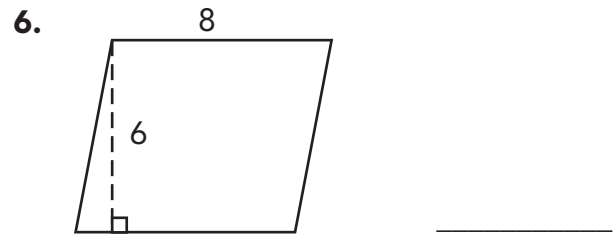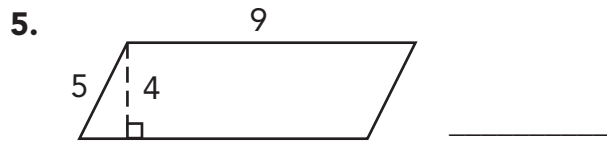
Name _____

Challenge! How is finding the area of a parallelogram different from finding the area of a rectangle? How is it similar? Draw a picture to help.

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Name _____

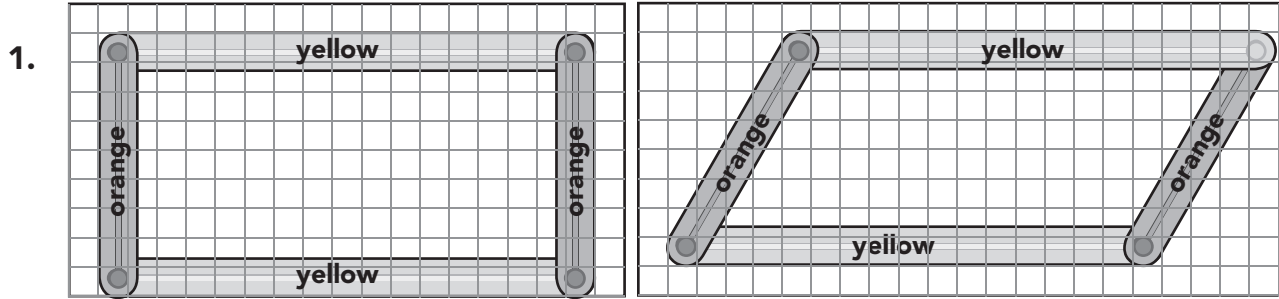**Use AngLegs® and grid paper to model the shapes shown. Find the perimeter of each shape. Find the area of each shape.**

1.

Perimeter of rectangle_____ units

Area of rectangle _____ sq units

Perimeter of parallelogram _____ units

Area of parallelogram_____sq units

Using AngLegs and grid paper, model two shapes that have the given perimeter, but different areas. Name the area of each shape.
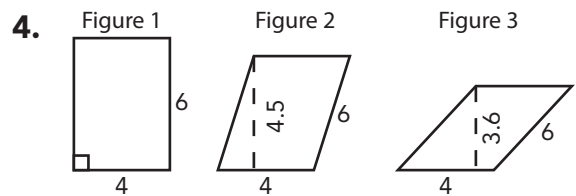
2. 50 units

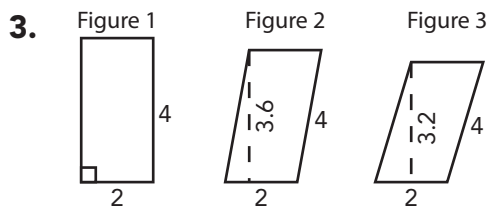Figure 1

Figure 2

Area of Figure 1 _____

Area of Figure 2 _____

Find the perimeter and area of each figure.

3.

Figure 1   Figure 2   Figure 3

4.

Figure 1   Figure 2   Figure 3
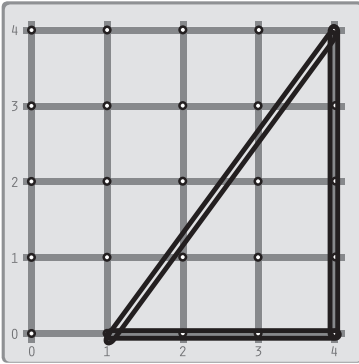

_____

_____

www.hand2mind.com   ●●●●●●

Name

Challenge! How can a rectangle with side lengths of 6 and 10 have a different area than a parallelogram with side lengths of 6 and 10? What do you know about their perimeters? Draw a picture to help.
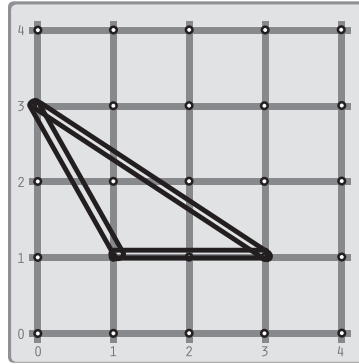
3 Geometry

Name _____

Use a Geoboard to model each triangle. Find its area.
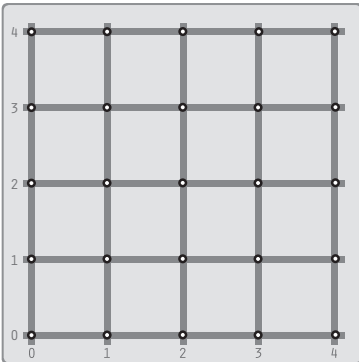
1.

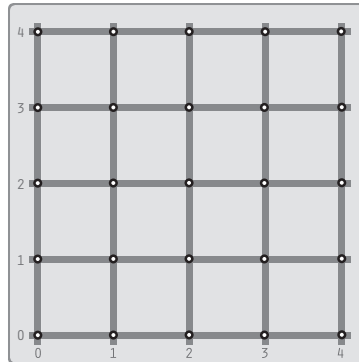_____ square units

2.

_____ square units

Using a Geoboard, model each triangle. Sketch the model. Find its area.
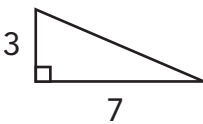
3. base: 4 units, height: 2 units

_____ square units

4. base: 4 units, height: 4 units

_____ square units

Find the area of each triangle.

5.

3

7
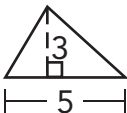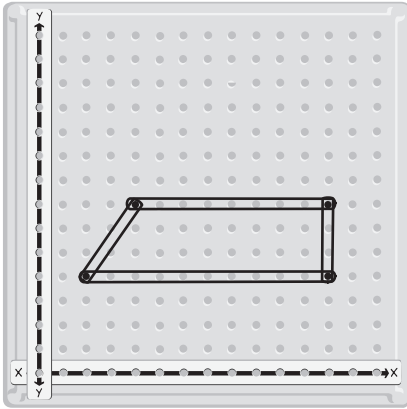
_____

6.

2

10

_____

7.

3

5

_____

© ETA hand2mind™
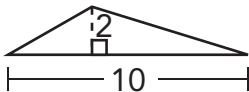
Name _____

Challenge!   Explain why the formula for the area of a triangle includes
the fraction $\frac{1}{2}$. Draw a picture.

_____

_____

_____

_____

_____
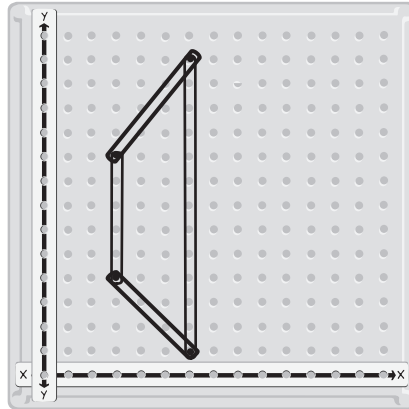
_____

_____

_____

_____

_____

Name _____

Use an XY Coordinate Pegboard to model the trapezoids. Divide each trapezoid into two triangles. Find the area of each trapezoid.

1.

Area of triangle _____ sq. units

Area of triangle _____ sq. units

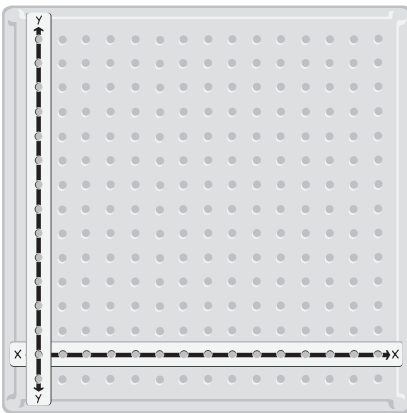Area of trapezoid _____ sq. units

2.

Area of triangle _____ sq. units

Area of triangle _____ sq. units

Area of trapezoid _____ sq. units

Using an XY Coordinate Pegboard, model a trapezoid with the given area. Sketch the model. Answer the questions.
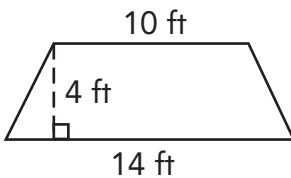
3. 64 square units

What is the length of the short base? _____

What is the length of the long base? _____

What is the height? _____

Find the area of each trapezoid.

4.

10 ft

4 ft

14 ft

**5.** bases, 4 in. and 6 in.
height, 5 in.

_____

6. bases, 9 cm and 10 cm
height, 6 cm

_____

Name _____

Challenge!   How is finding the area of a trapezoid related to finding the area of two triangles, each with a base length equal to a base length of the trapezoid. Draw a picture to help.

_____

_____

_____

_____

_____
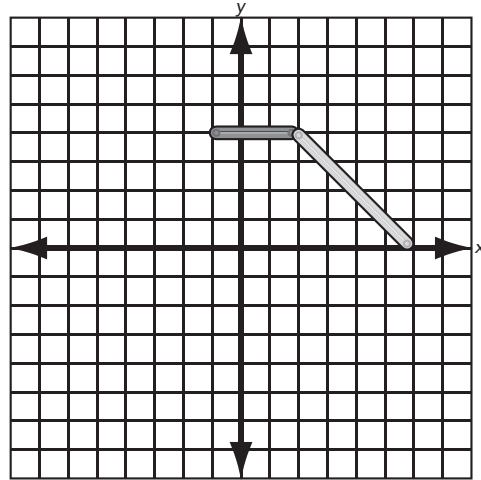
_____

_____

_____

_____

_____

Name _____

Use AngLegs® and graph paper to model each shape in a coordinate plane. Part of the shape is shown. Name the coordinates of the vertices that complete the shape.

1. rectangle with vertices at (2, 1) and (2, 5)
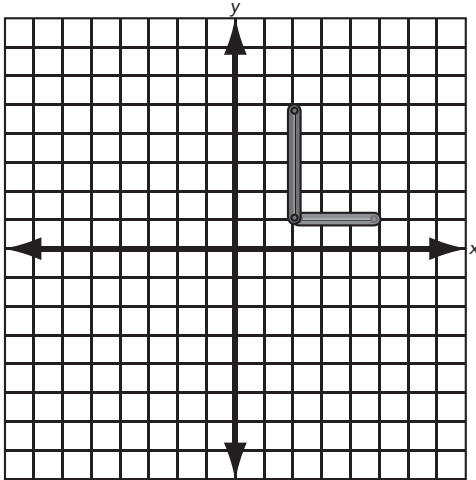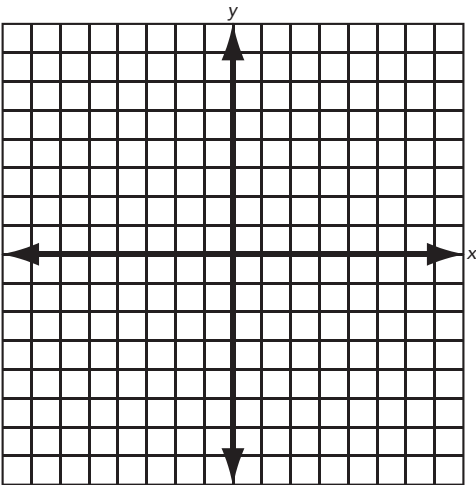

The other vertices are at

_____ .

2. isosceles trapezoid with short base 3 units, long base 11 units

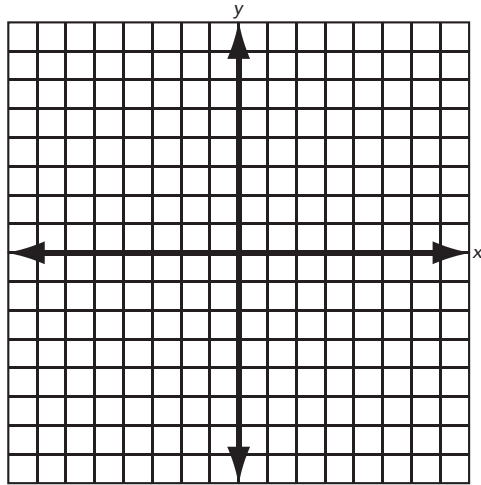The vertices of the long base are

_____ .

Using AngLegs, model each shape. Sketch the model. Name the vertices.

3. square in the second quadrant that has sides 5 units long

The vertices of the square are

_____ .

4. rectangle in the third and fourth quadrants, 7 units by 4 units

The vertices of the rectangle are
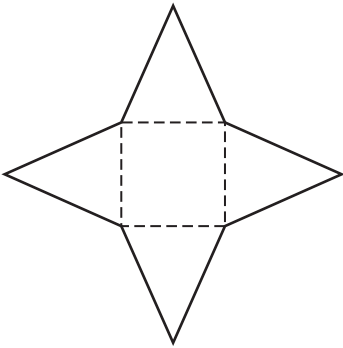
_____ .

Name _____

Challenge! If a rectangle has one vertex at (4, 4) and its opposite vertex is at (–5, –5), in what quadrants is the rectangle? Draw a picture to help.

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Name _____

Use Relational GeoSolids to identify the solid for each net that is shown. Name the solid.

1.

_____

2.

_____
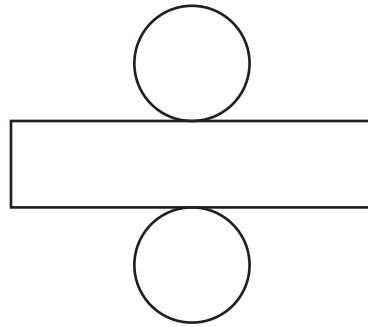
Use Relational GeoSolids to help you draw a net for each solid. Sketch the net.

3. cube

4. triangular prism

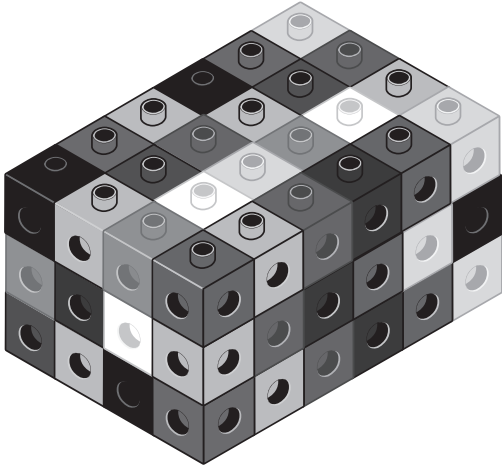**5.** rectangular prism

6. hexagonal prism

Name _____

Challenge!   How many different nets can you draw for a cube?

_____

_____

_____

_____

_____

Name _____

Use Snap Cubes to build the rectangular solid. Find the surface area.

1.

area of top surface _____

area of bottom surface _____

area of right side surface _____

area of left side surface _____

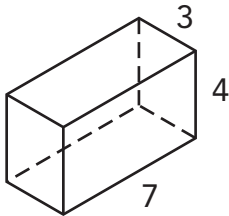area of front surface _____

area of back surface _____

Total surface area _____

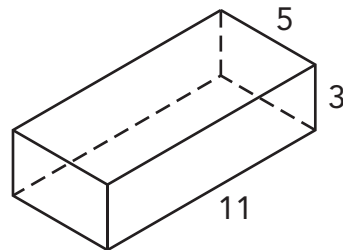**Using Snap Cubes, build the solid with the given dimensions. Sketch the model. Find the surface area.**

2. length: 5 units, width: 4 units, and height: 5 units

_____

Find the surface area of each rectangular solid.

3.

3

4

7

_____

4.

5

3

11

_____

5. length: 6 units
width: 4 units
height: 1 unit

_____

6. length: 9 units
width: 2 units
height: 2 units

_____

Name _____

Challenge!   How many faces does a rectangular solid have? How are these faces used to find the surface area of the solid?

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____