

3D Vocabulary

POLYGON REVIEW

A polygon has the following characteristics:

1. _____

2. _____

3. _____

4. _____

5. _____

Which of the following are polygons? Give a reason for each choice.

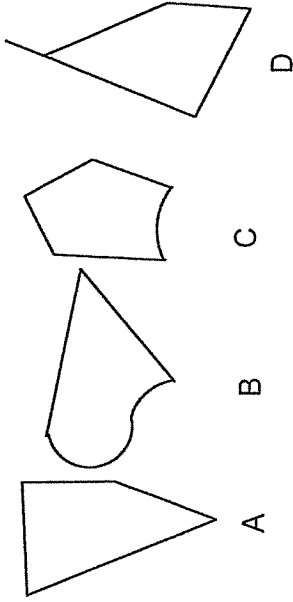


Figure A: Polygon Non-polygon

Why? _____

Figure B: Polygon Non-polygon

Why? _____

Figure C: Polygon Non-polygon

Why? _____

Figure D: Polygon Non-polygon

Why? _____

POLYHEDRONS

A polyhedron is _____

All of these figures are called solids. Which of the following solids are polyhedrons?

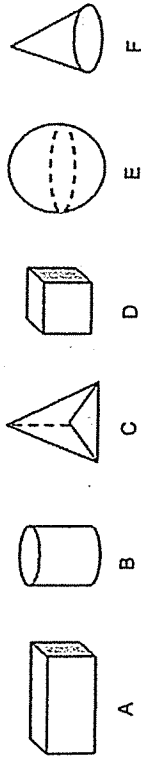


Figure A: Polyhedron Non-polyhedron
 Why? _____

Figure B: Polyhedron Non-polyhedron
 Why? _____

Figure C: Polyhedron Non-polyhedron
 Why? _____

Figure D: Polyhedron Non-polyhedron
 Why? _____

Figure E: Polyhedron Non-polyhedron
 Why? _____

Figure F: Polyhedron Non-polyhedron
 Why? _____

PRISMS AND PYRAMIDS

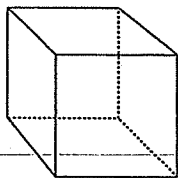
Prisms and Pyramids are both Polyhedrons.

A Prism is _____

A Pyramid is _____

Which of the following are Prisms and which are Pyramids?

1.

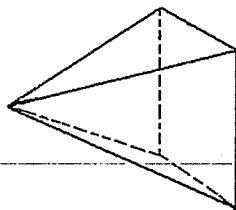


Is this figure a Prism or Pyramid?

How do you know?

What is the specific name of this figure?

2.

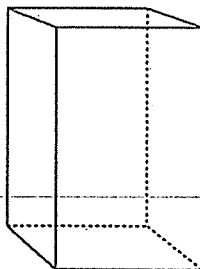


Is this figure a Prism or Pyramid?

How do you know?

What is the specific name of this figure?

3.

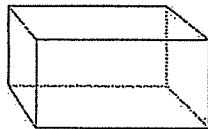


Is this figure a Prism or Pyramid?

How do you know?

What is the specific name of this figure?

4.

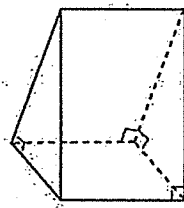


Is this figure a Prism or Pyramid?

How do you know?

What is the specific name of this figure?

5.

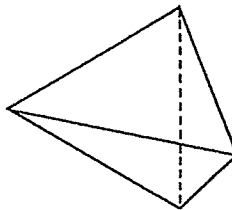


Is this figure a Prism or Pyramid?

How do you know?

What is the specific name of this figure?

6.



Is this figure a Prism or Pyramid?

How do you know?

What is the specific name of this figure?

6.G.A.4

Name _____

Net Investigation

Directions: Cut out and build the nets. When this is complete, answer the following questions about each net.

1. Cube

Number of Vertices: _____ Faces: _____ Edges: _____

How many bases does a Cube have? _____

What is the shape of the bases? _____

How many lateral faces does a Cube have? _____

What is the shape of the lateral faces? _____

2. Rectangular Prism

Number of Vertices: _____ Faces: _____ Edges: _____

How many bases does a Rectangular Prism have? _____

What is the shape of the bases? _____

How many lateral faces does a Rectangular Prism have? _____

What is the shape of the lateral faces? _____

3. Triangular Prism

Number of Vertices: _____ Faces: _____ Edges: _____

How many bases does a Triangular Prism have? _____

What is the shape of the bases? _____

How many lateral faces does a Triangular Prism have? _____

What is the shape of the lateral faces? _____

4. Square Pyramid

Number of Vertices: _____ Faces: _____ Edges: _____

How many bases does a Square Pyramid have? _____

What is the shape of the bases? _____

How many lateral faces does a Square Pyramid have? _____

What is the shape of the lateral faces? _____

5. Triangular Pyramid

Number of Vertices: _____ Faces: _____ Edges: _____

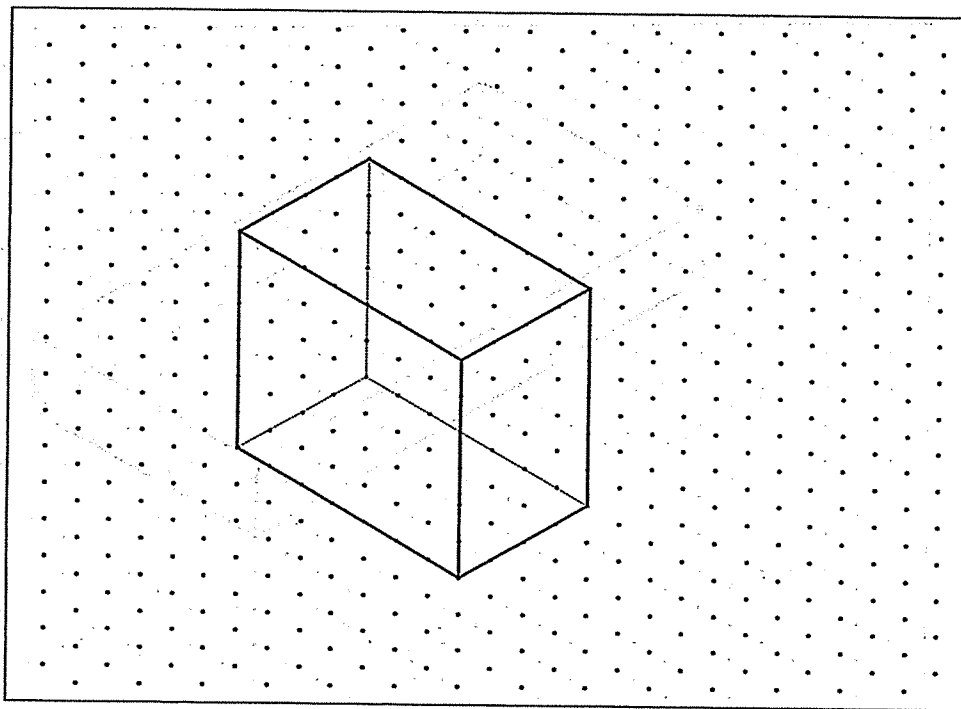
How many bases does a Triangular Pyramid have? _____

What is the shape of the bases? _____

How many lateral faces does a Triangular Pyramid have? _____

What is the shape of the lateral faces? _____

Use three different colored pencils. Color the vertices, edges, and faces each with a different color.



Vertices: Color _____

Number of Vertices _____

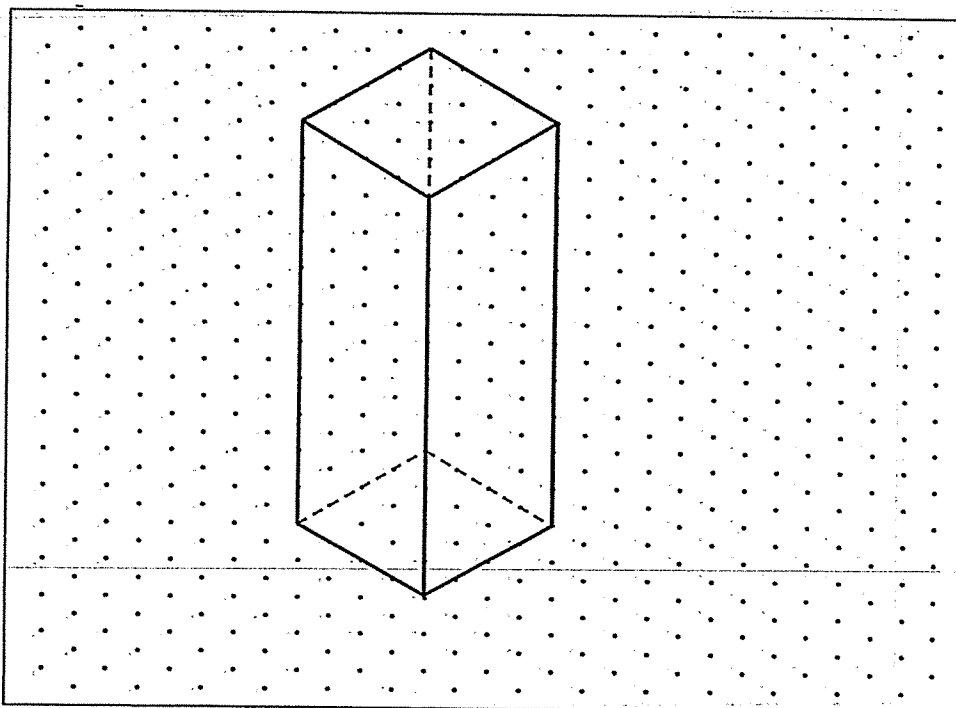
Edges: Color _____

Number of Edges _____

Faces: Color _____

Number of Faces _____

Use three different colored pencils. Color the vertices, edges, and faces each with a different color.



Vertices: Color _____

Number of Vertices _____

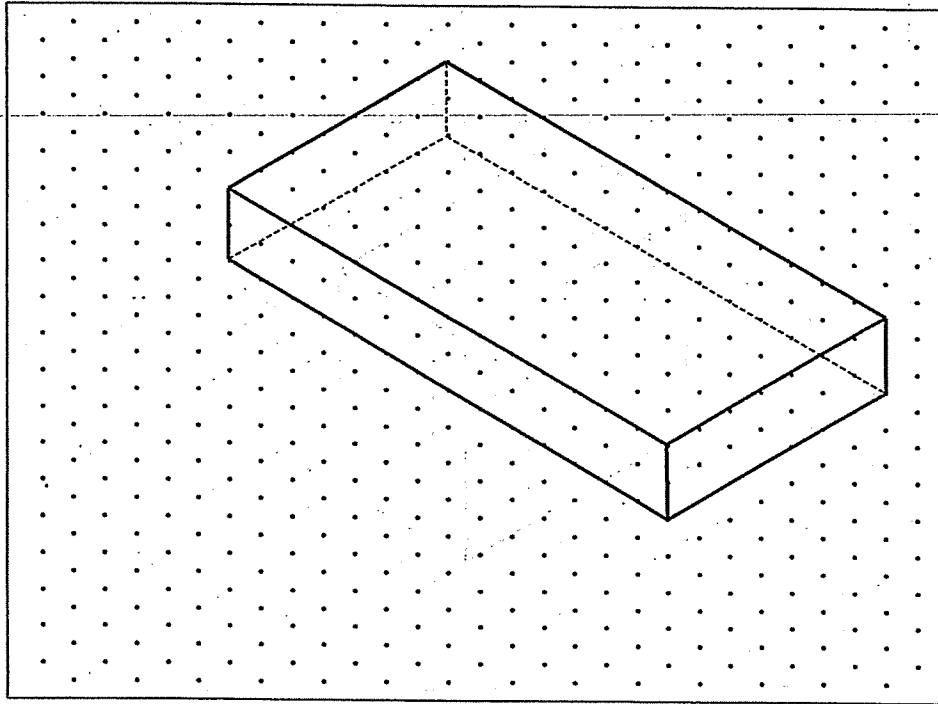
Edges: Color _____

Number of Edges _____

Faces: Color _____

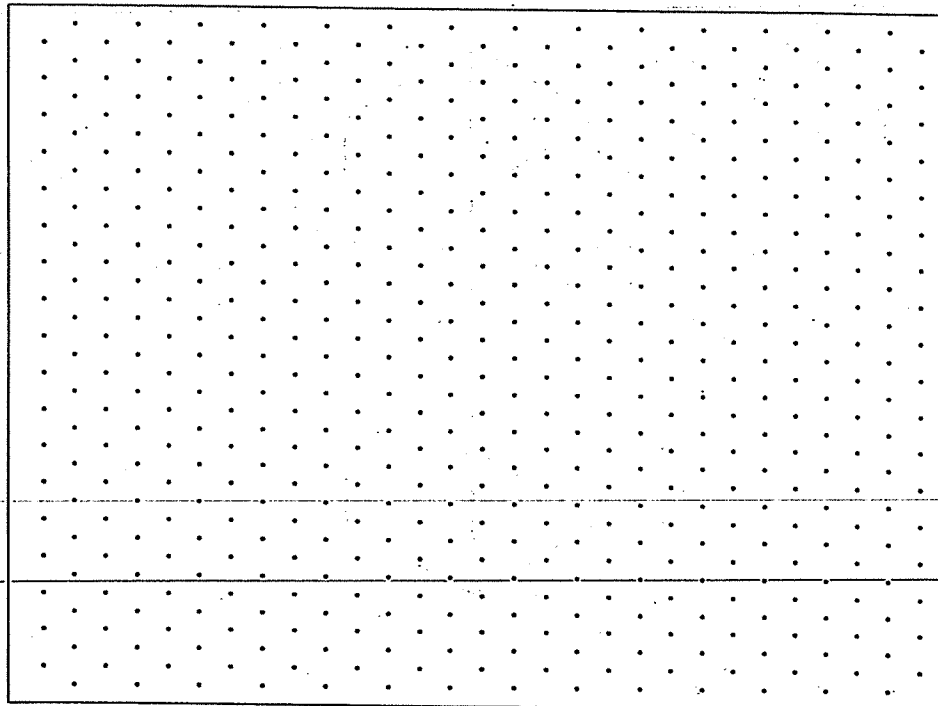
Number of Faces _____

Use three different colored pencils. Color the vertices, edges, and faces each with a different color.



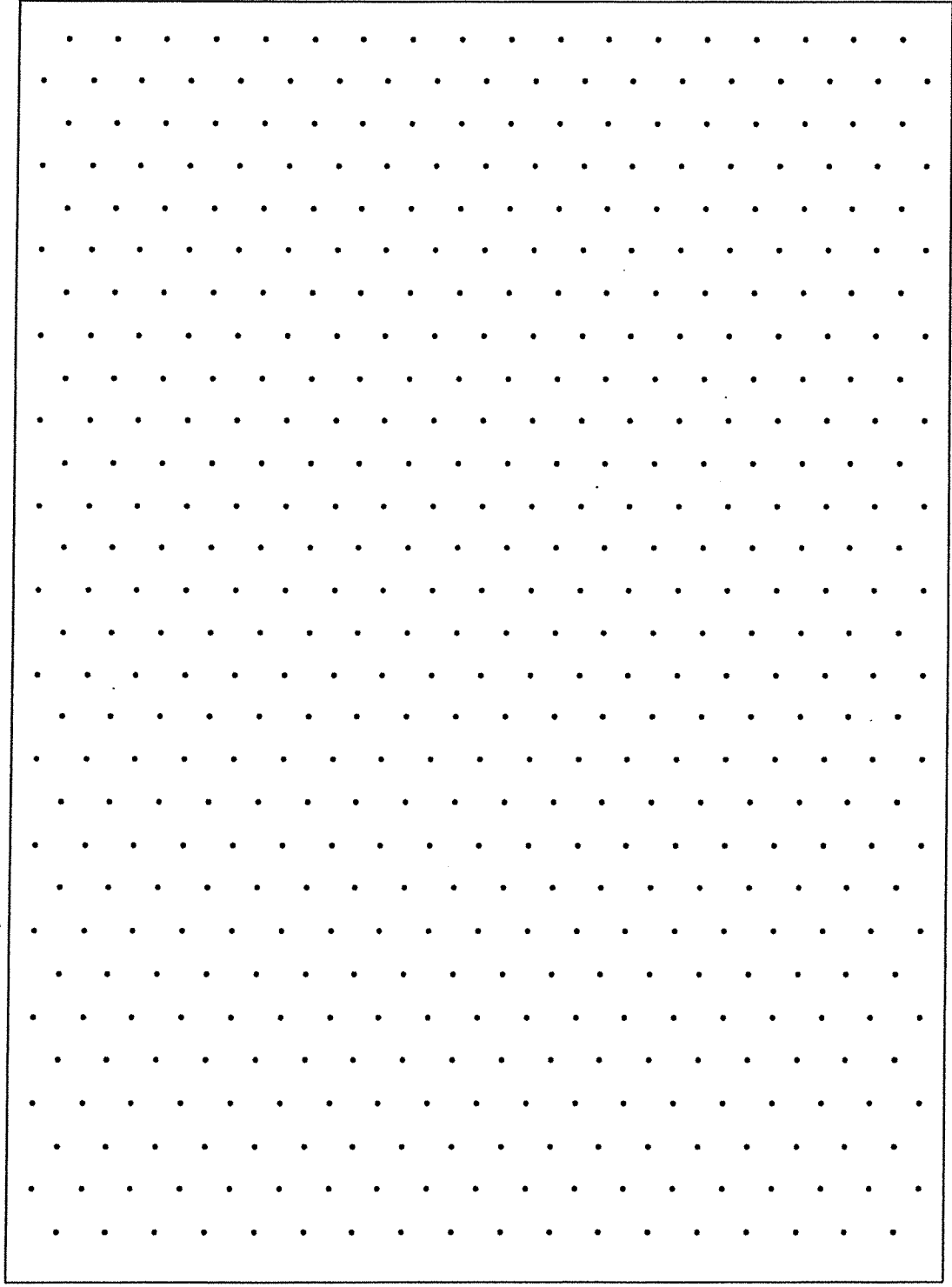
Vertices: Color _____ Number of Vertices _____
 Edges: Color _____ Number of Edges _____
 Faces: Color _____ Number of Faces _____

Make a rectangular prism with a height of 7, width of 3, and length of 4. Use three different colored pencils. Color the vertices, edges, and faces each with a different color.



Vertices: Color _____ Number of Vertices _____
 Edges: Color _____ Number of Edges _____
 Faces: Color _____ Number of Faces _____

Make a rectangular prism with a height of 8, width of 2, and length of 5. Use three different colored pencils. Color the vertices, edges, and faces each with a different color.



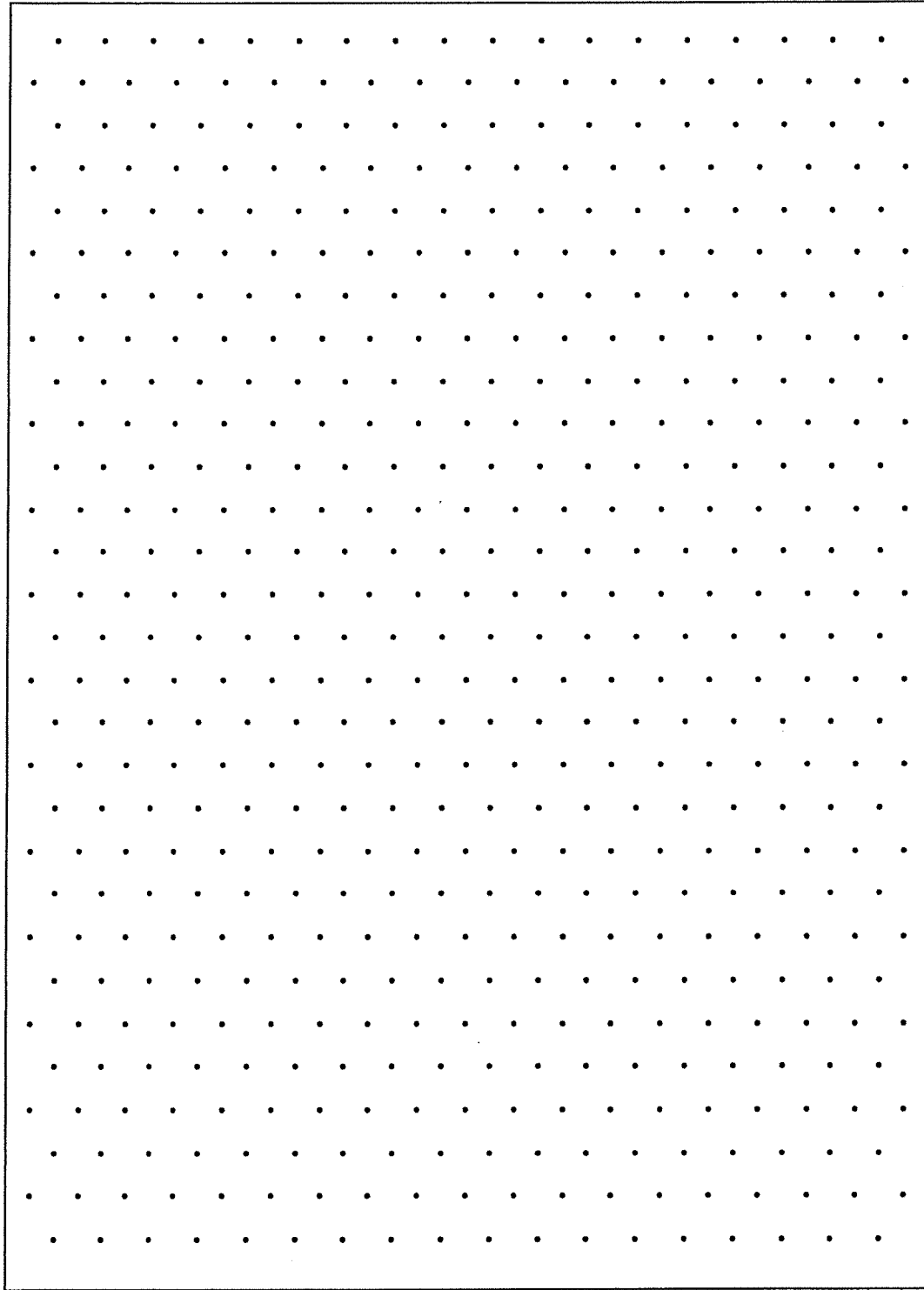
Vertices:	Color _____	Number of Vertices _____
Edges:	Color _____	Number of Edges _____
Faces:	Color _____	Number of Faces _____

6.G.A.4

Vertices, Edges, and Faces #6

NAME: _____

Make a rectangular prism with a height of 3, width of 6, and length of 4. Use three different colored pencils. Color the vertices, edges, and faces each with a different color.



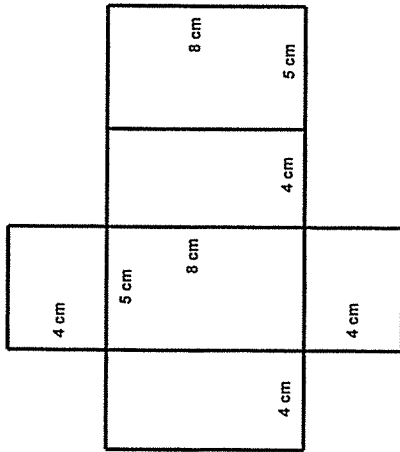
Vertices:	Color _____	Number of Vertices _____
Edges:	Color _____	Number of Edges _____
Faces:	Color _____	Number of Faces _____

6.G.A.4

NAME: _____

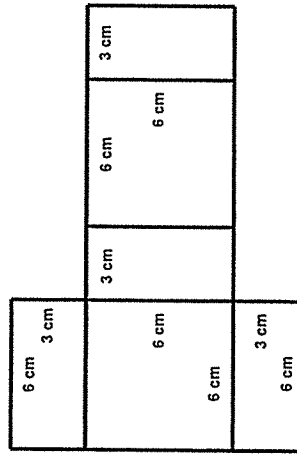
FINDING SURFACE AREA FROM NETS WITH DIMENSIONS #1

- 1.) Find the surface area of the rectangular prism. Show all work.



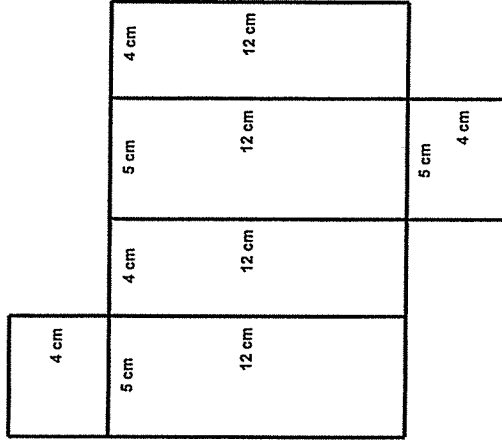
Surface Area: _____

- 2.) Find the surface area of the rectangular prism. Show all work.



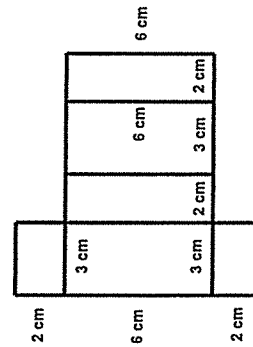
Surface Area: _____

- 3.) Find the surface area of the rectangular prism. Show all work.



Surface Area: _____

- 4.) Find the surface area of the rectangular prism. Show all work.

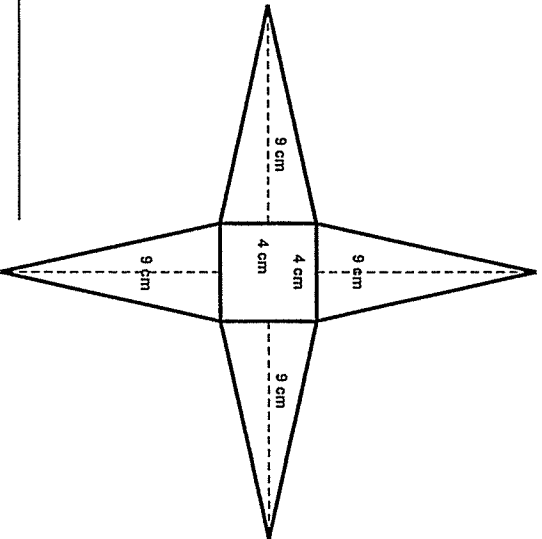


Surface Area: _____

6.G.A.4 NAME: _____

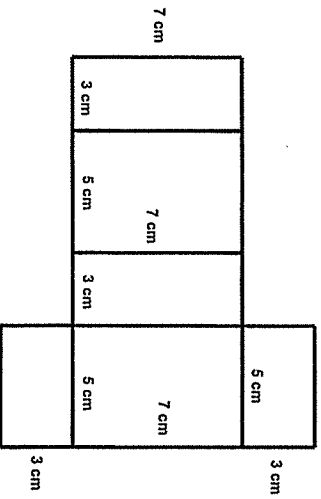
FINDING SURFACE AREA FROM NETS WITH DIMENSIONS #2

- 1.) Find the surface area of the square pyramid. Show all work.



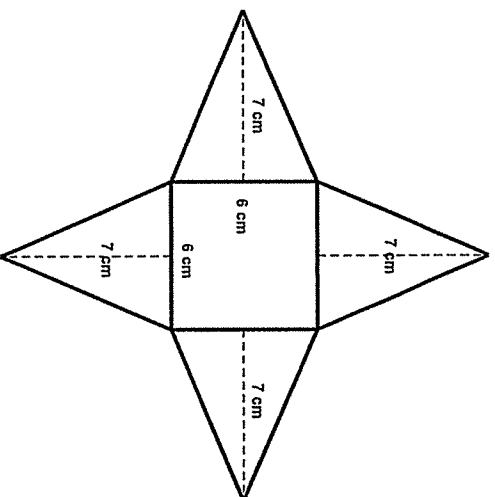
Surface Area: _____

- 2.) Find the surface area of the rectangular prism. Show all work.



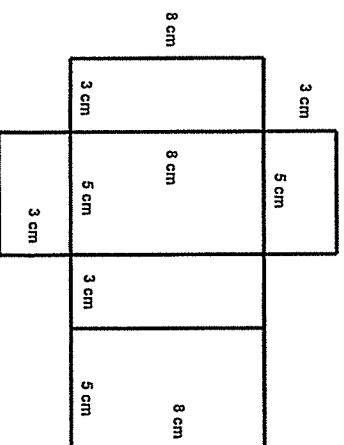
Surface Area: _____

- 3.) Find the surface area of the square pyramid. Show all work.



Surface Area: _____

- 4.) Find the surface area of the rectangular prism. Show all work.



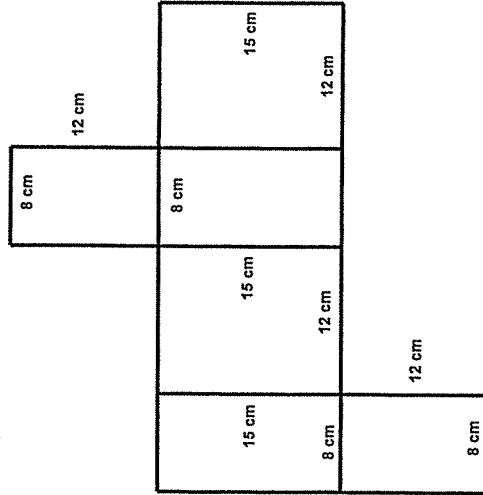
Surface Area: _____

6.G.A.4

NAME: _____

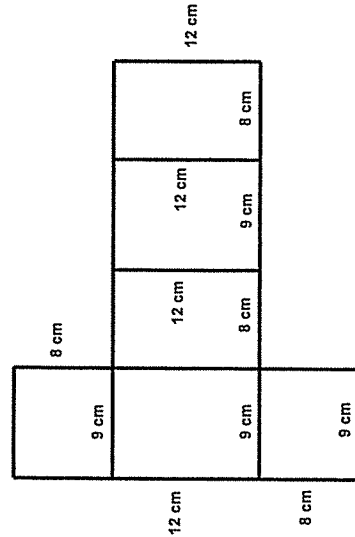
FINDING SURFACE AREA FROM NETS WITH DIMENSIONS #3

- 1.) Find the surface area of the rectangular prism. Show all work.



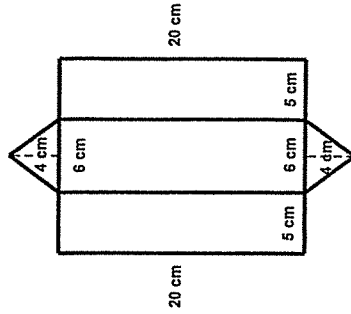
Surface Area: _____

- 2.) Find the surface area of the rectangular prism. Show all work.



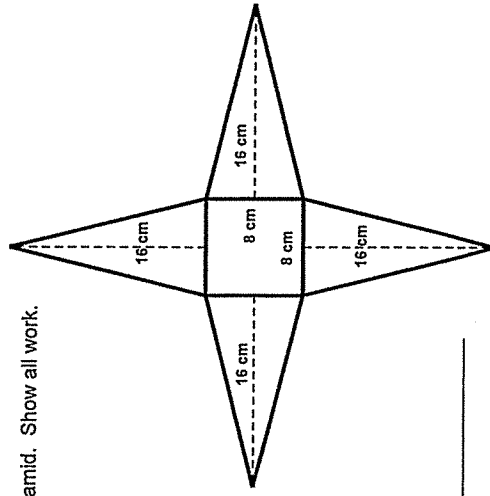
Surface Area: _____

- 3.) Find the surface area of the triangular prism. Show all work.

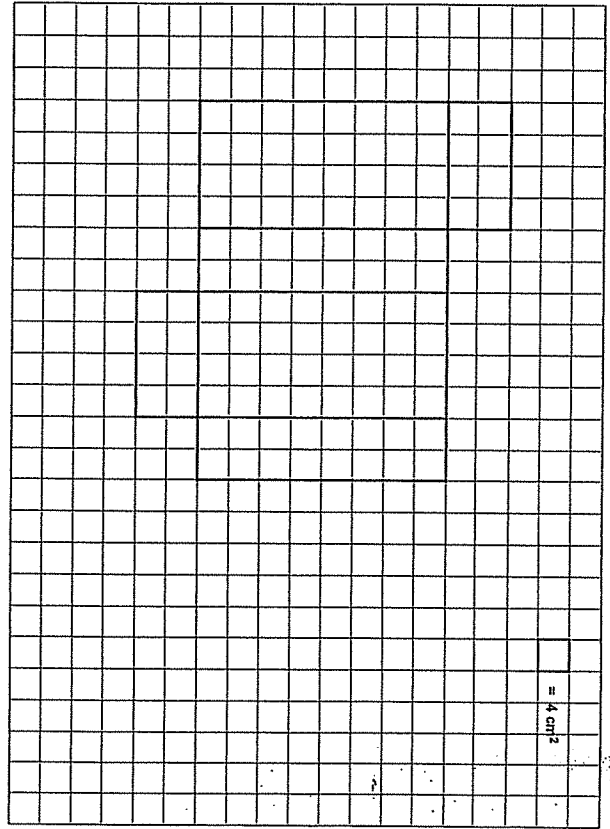
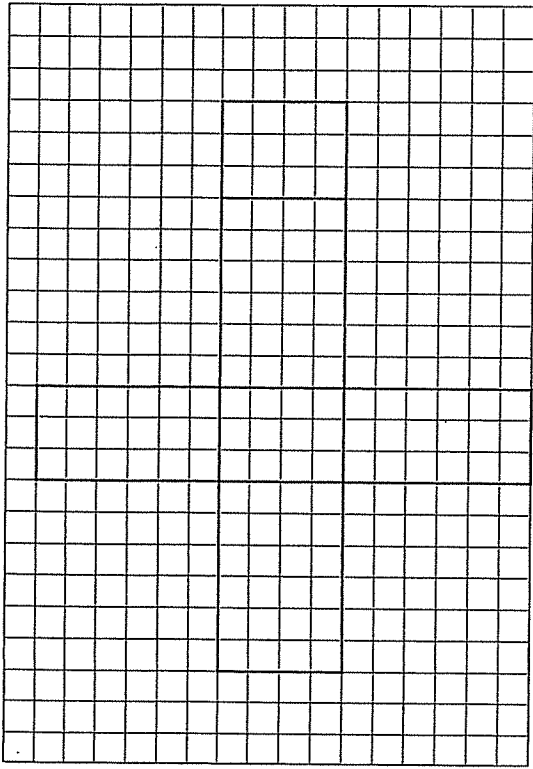


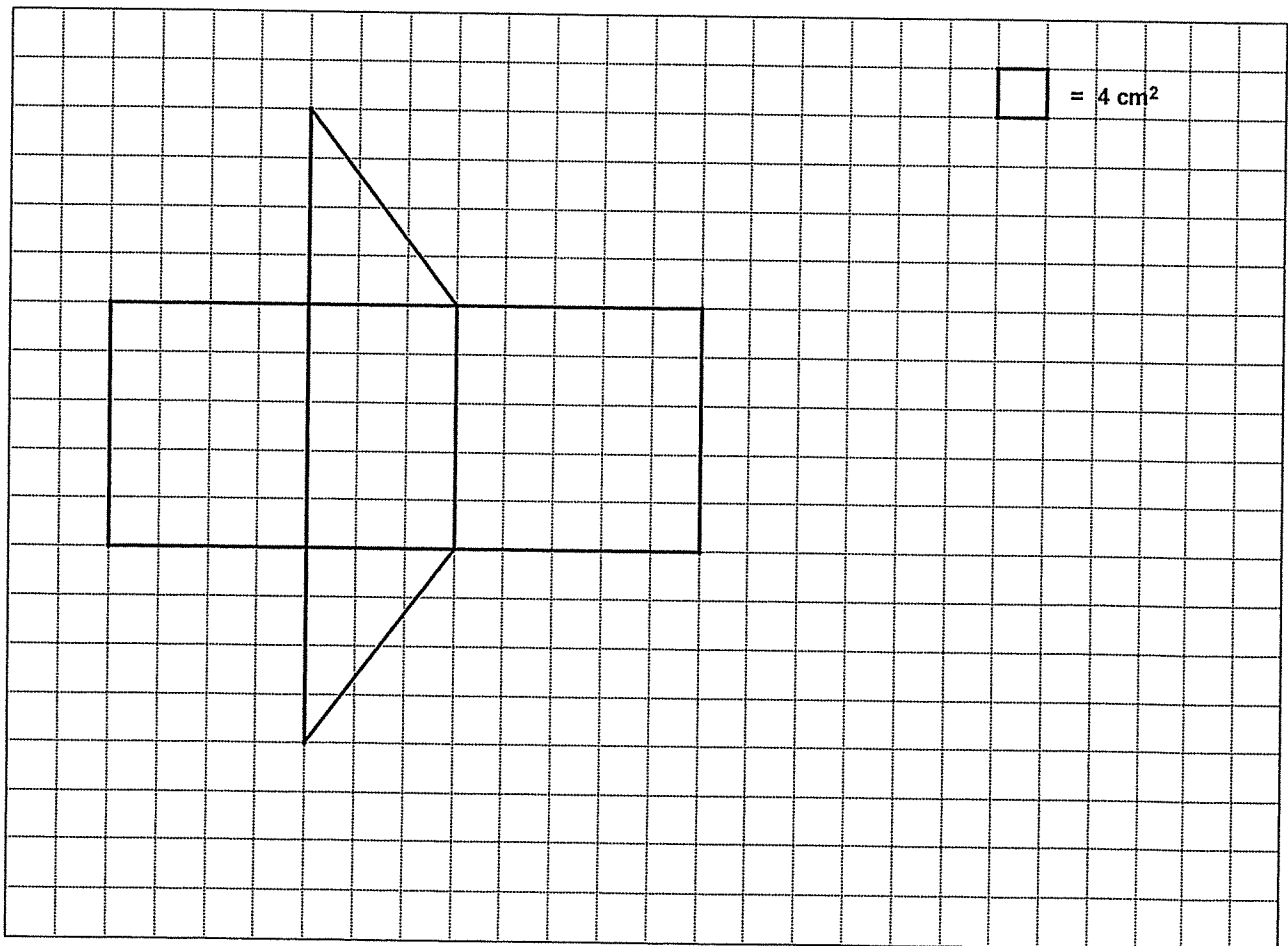
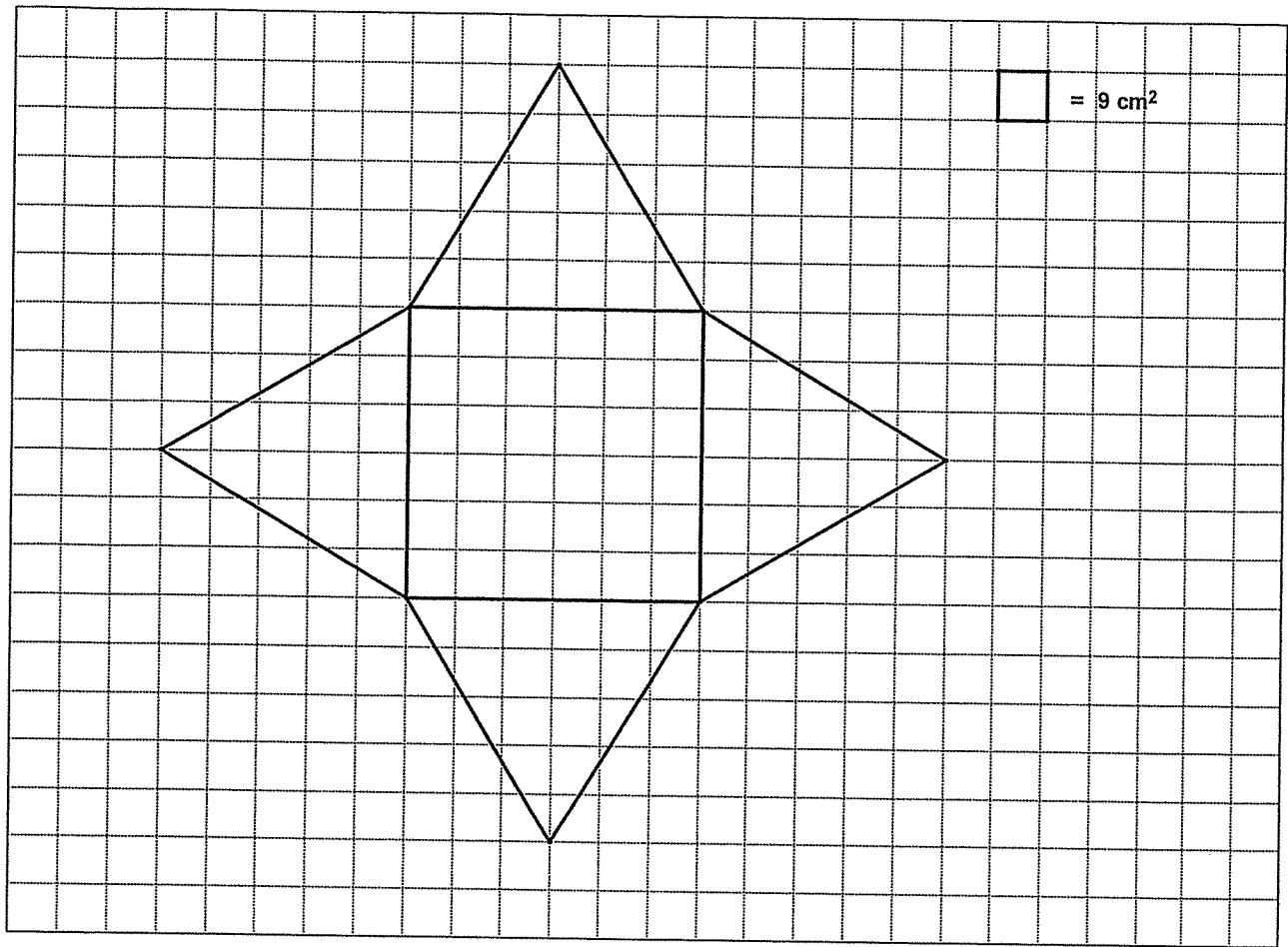
Surface Area: _____

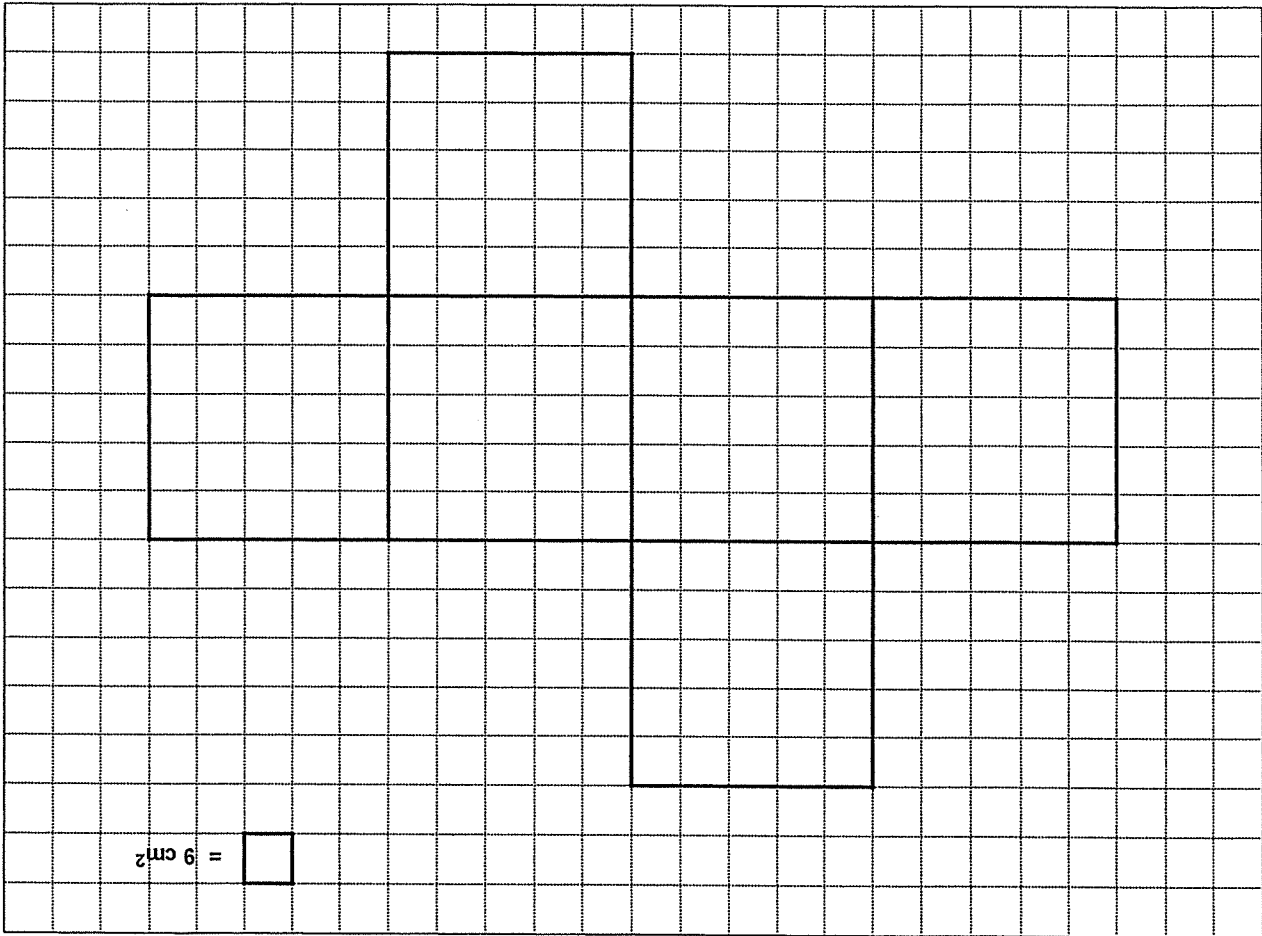
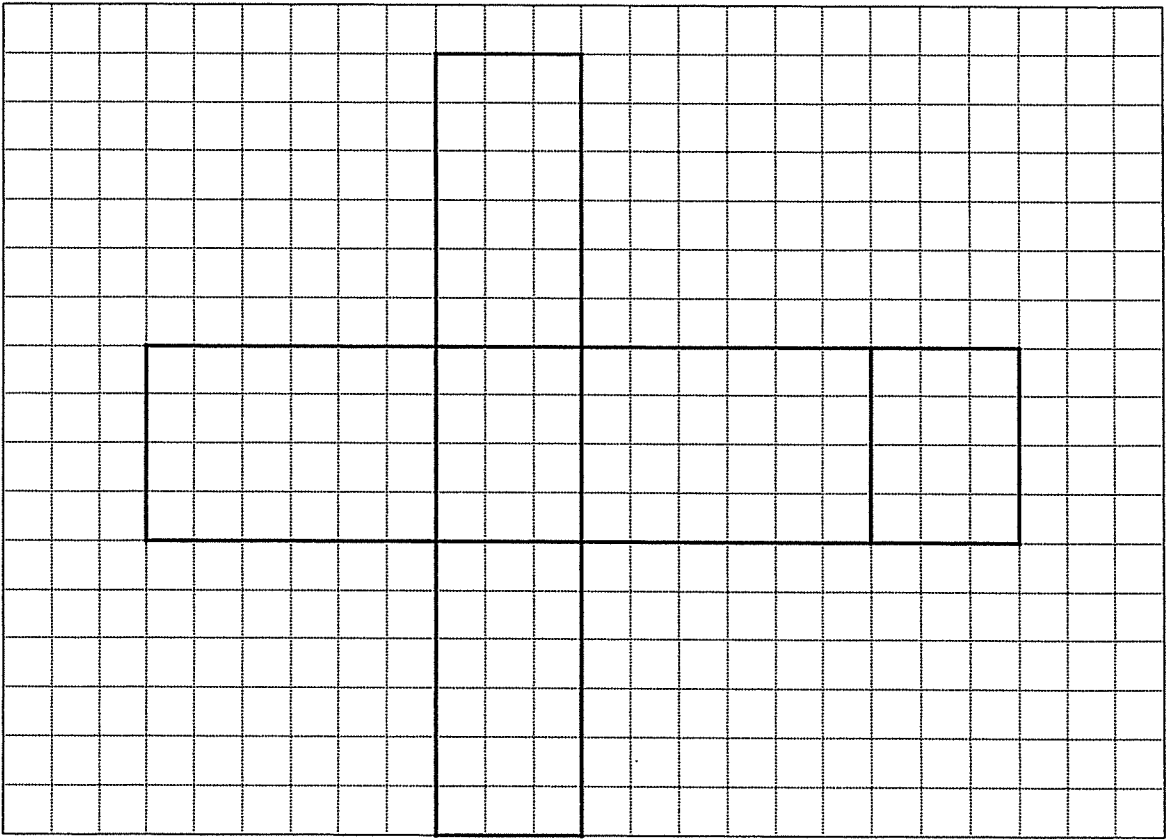
- 4.) Find the surface area of the square pyramid. Show all work.



Surface Area: _____





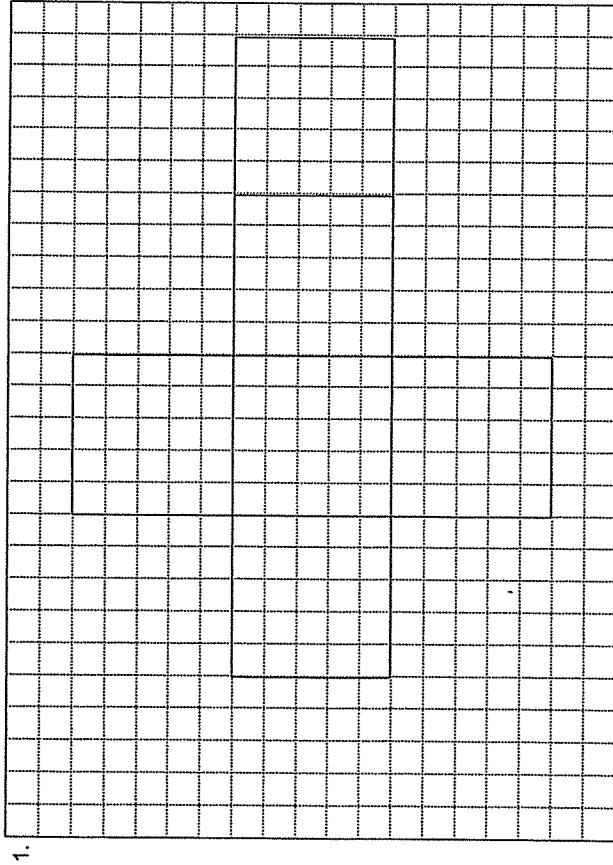


6.G.A.4

Name _____

Using Nets to Calculate Surface Area #1

For all grids,  = 1 square cm



What is the name of this figure? _____

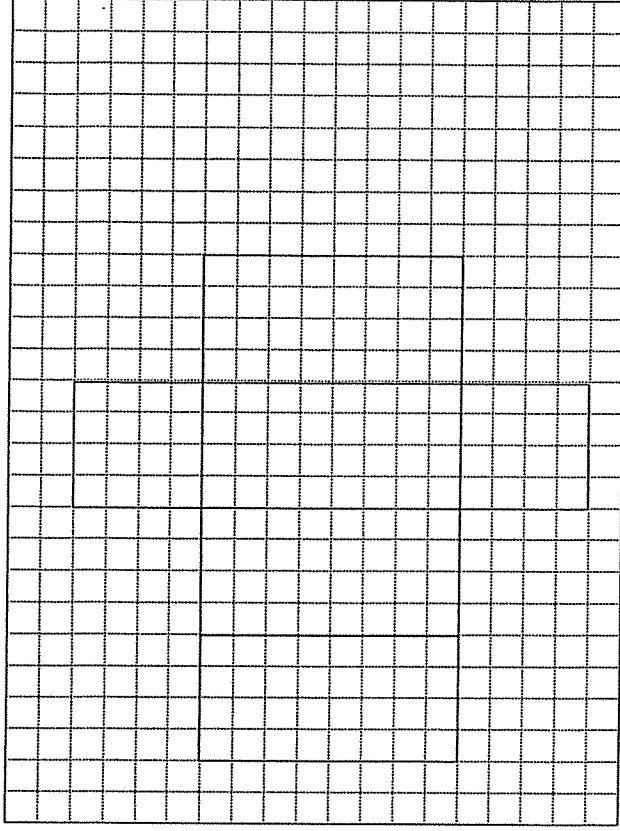
What is the shape of the base(s)? _____ How many bases? _____

What is the shape of the lateral faces? _____ How many lateral faces? _____

Calculate the surface area for this figure:

The surface area of this _____ is _____.

2.



What is the name of this figure? _____

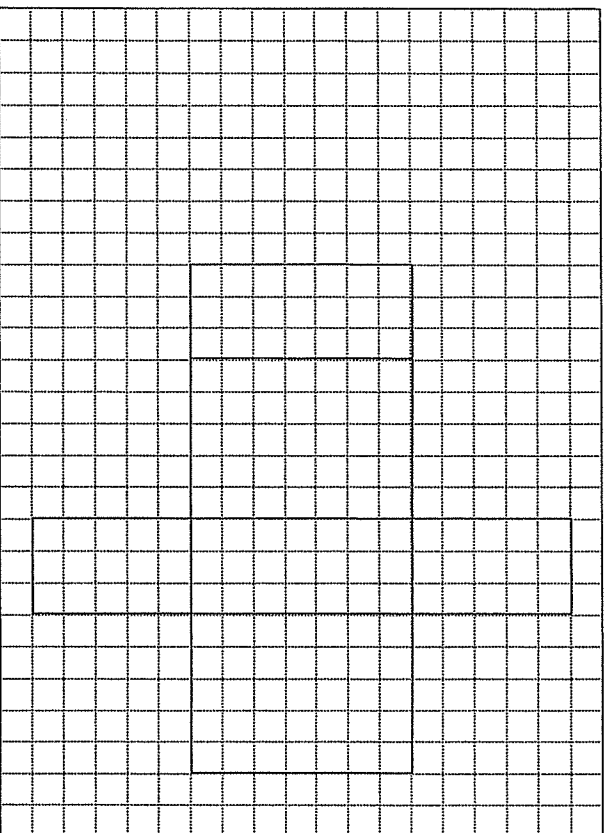
What is the shape of the base(s)? _____ How many bases? _____

What is the shape of the lateral faces? _____ How many lateral faces? _____

Calculate the surface area for this figure:

The surface area of this _____ is _____.

3.



What is the name of this figure? _____

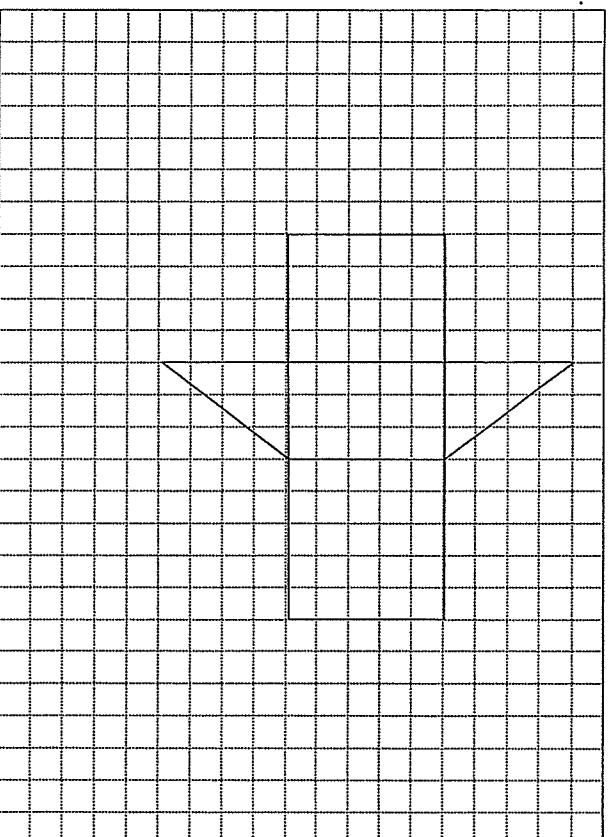
What is the shape of the base(s)? _____ How many bases? _____

What is the shape of the lateral faces? _____ How many lateral faces? _____

Calculate the surface area for this figure:

The surface area of this _____ is _____.

4.



What is the name of this figure? _____

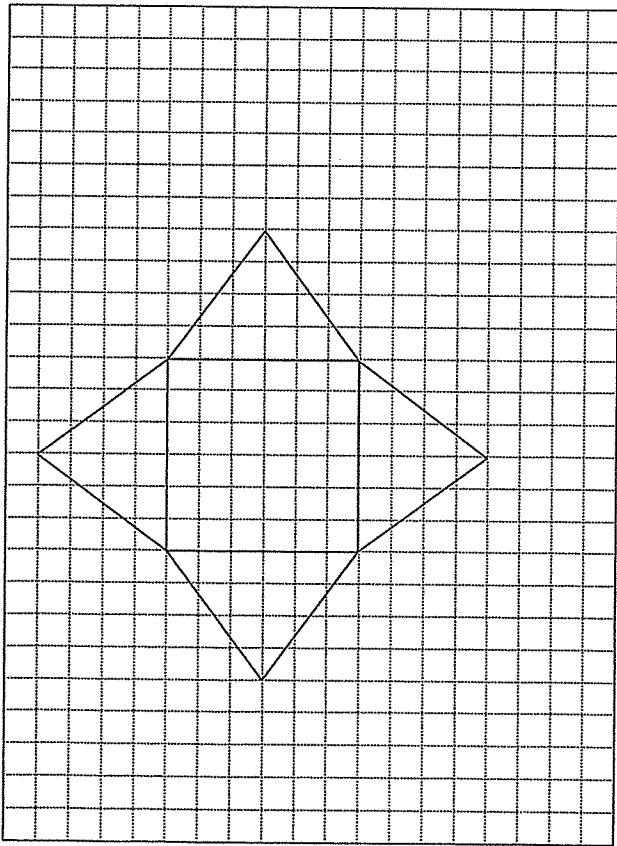
What is the shape of the base(s)? _____ How many bases? _____

What is the shape of the lateral faces? _____ How many lateral faces? _____

Calculate the surface area for this figure:

The surface area of this _____ is _____.

5.



What is the name of this figure? _____

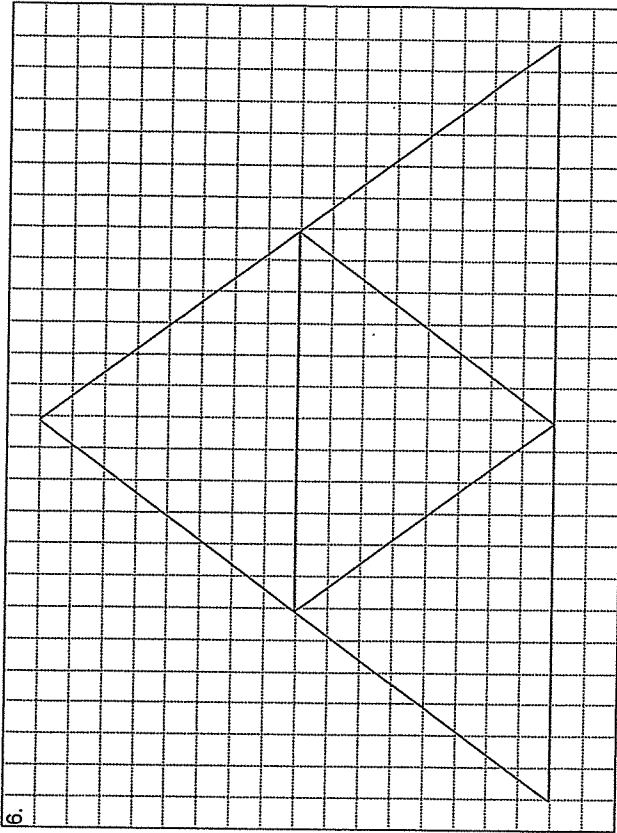
What is the shape of the base(s)? _____ How many bases? _____

What is the shape of the lateral faces? _____ How many lateral faces? _____

Calculate the surface area for this figure:

The surface area of this _____ is _____.

6.



What is the name of this figure? _____

What is the shape of the base(s)? _____ How many bases? _____

What is the shape of the lateral faces? _____ How many lateral faces? _____

Calculate the surface area for this figure:

The surface area of this _____ is _____.

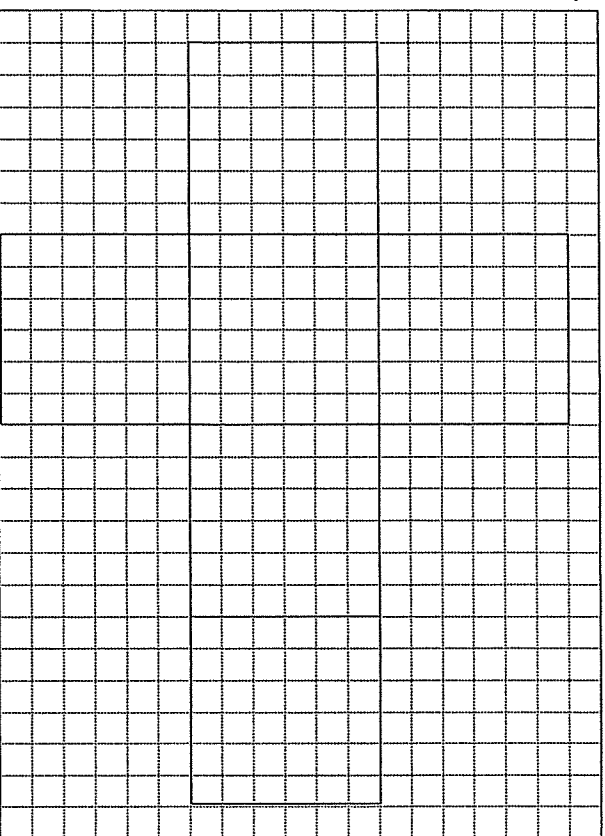
6.G.A.4

Name _____

Using Nets to Calculate Surface Area #2

For all grids,  = 1 square cm

1.



What is the name of this figure? _____

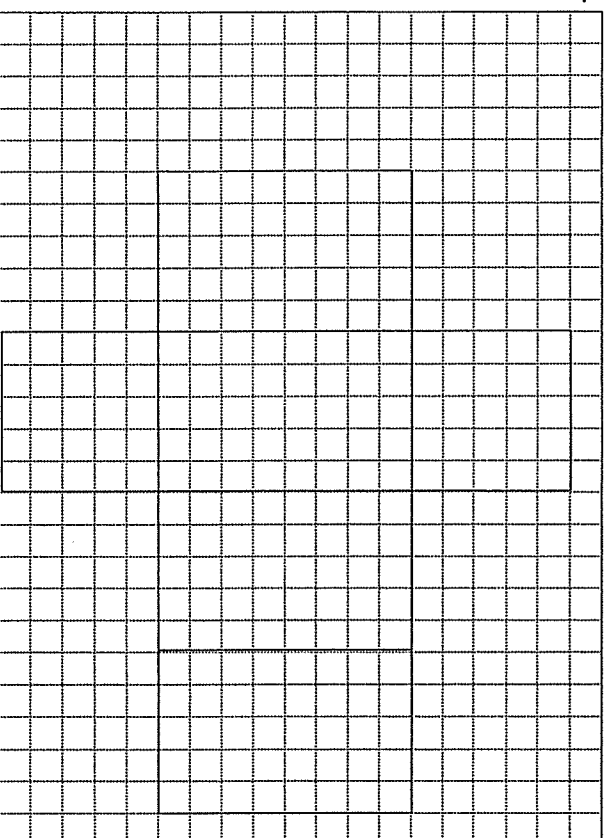
What is the shape of the base(s)? _____ How many bases? _____

What is the shape of the lateral faces? _____ How many lateral faces? _____

Calculate the surface area for this figure:

The surface area of this _____ is _____.

2.



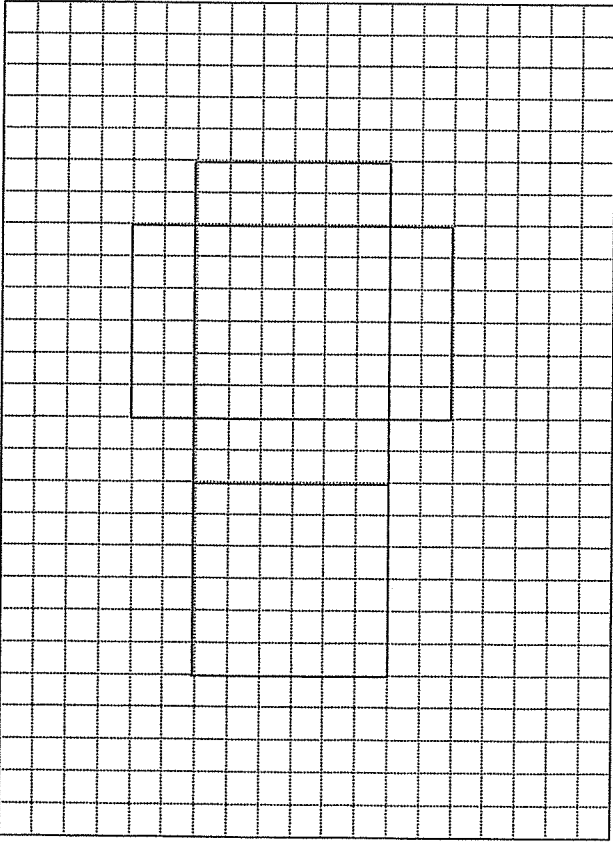
What is the name of this figure? _____

What is the shape of the base(s)? _____ How many bases? _____

What is the shape of the lateral faces? _____ How many lateral faces? _____

Calculate the surface area for this figure:

The surface area of this _____ is _____.



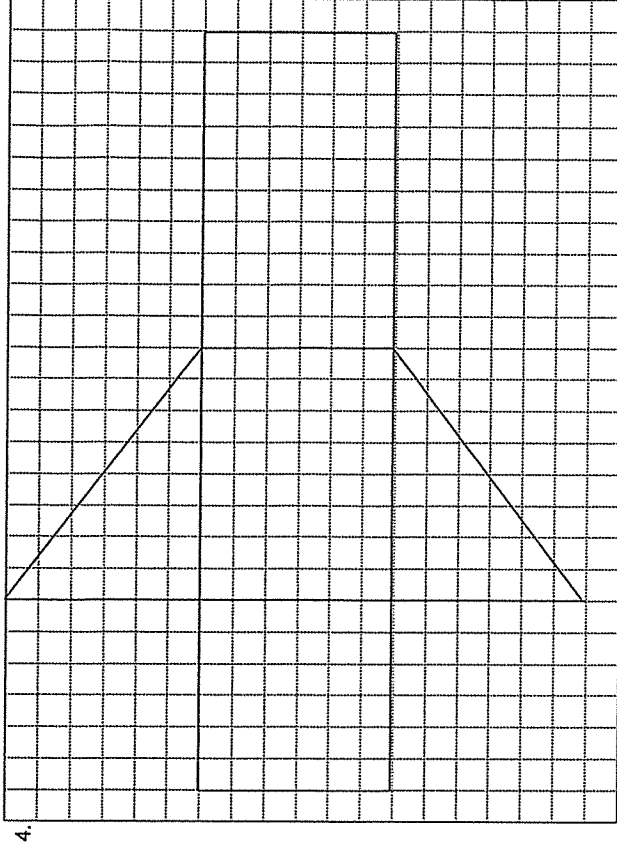
What is the name of this figure? _____

What is the shape of the base(s)? _____ How many bases? _____

What is the shape of the lateral faces? _____ How many lateral faces? _____

Calculate the surface area for this figure:

The surface area of this _____ is _____.



What is the name of this figure? _____

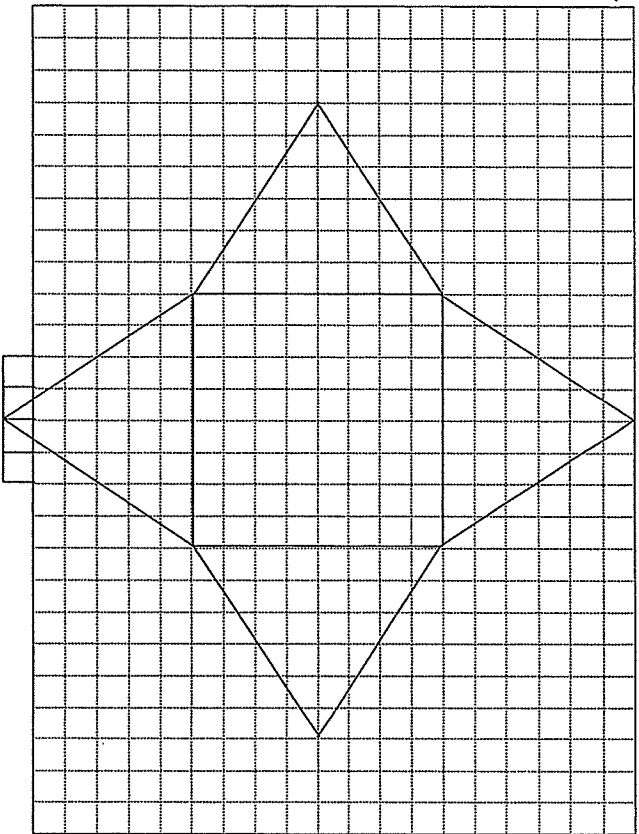
What is the shape of the base(s)? _____ How many bases? _____

What is the shape of the lateral faces? _____ How many lateral faces? _____

Calculate the surface area for this figure:

The surface area of this _____ is _____.

5.



What is the name of this figure? _____

What is the shape of the base(s)? _____ How many bases? _____

What is the shape of the lateral faces? _____ How many lateral faces? _____

Calculate the surface area for this figure:

The surface area of this _____ is _____.

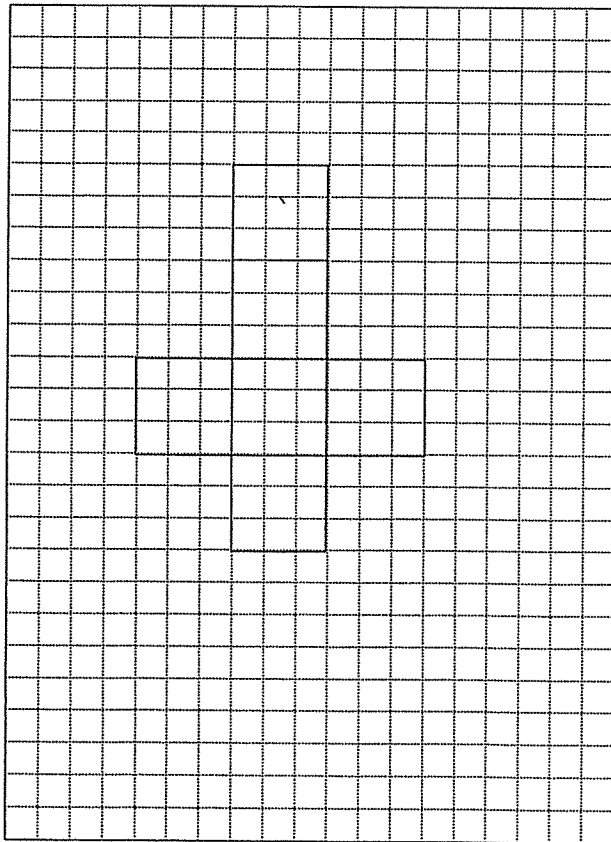
6.G.A.4

Name _____

Using Nets to Calculate Surface Area #3

For all grids, $\square = 1$ square cm

1.



What is the name of this figure? _____

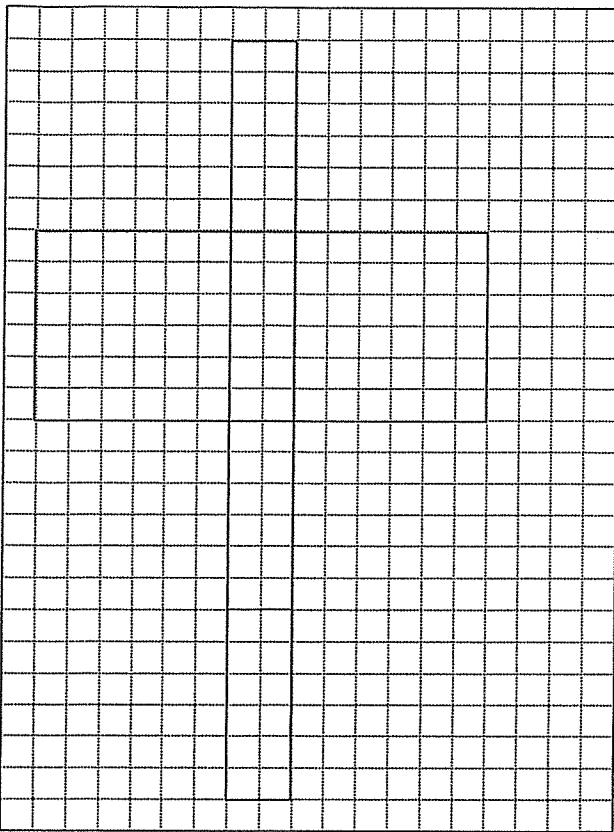
What is the shape of the base(s)? _____ How many bases? _____

What is the shape of the lateral faces? _____ How many lateral faces? _____

Calculate the surface area for this figure:

The surface area of this _____ is _____.

2.



What is the name of this figure? _____

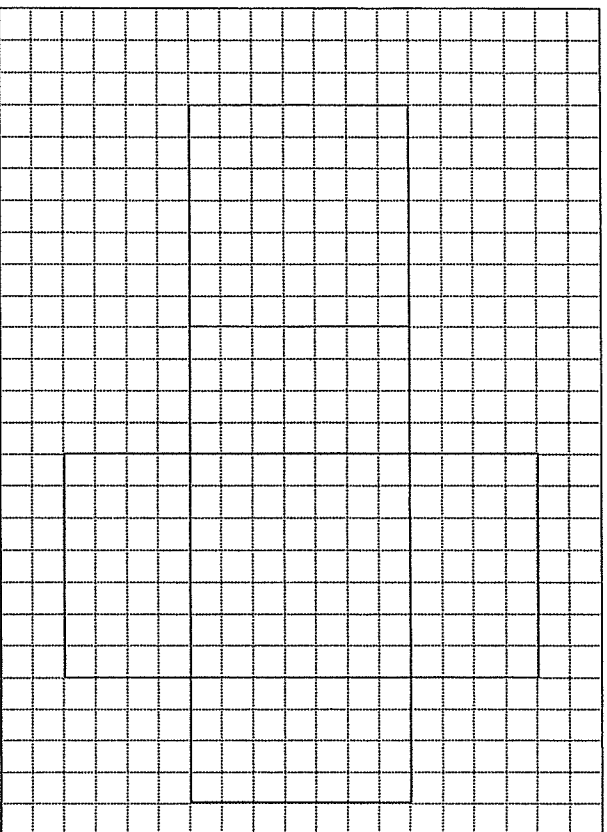
What is the shape of the base(s)? _____ How many bases? _____

What is the shape of the lateral faces? _____ How many lateral faces? _____

Calculate the surface area for this figure:

The surface area of this _____ is _____.

3.



What is the name of this figure? _____

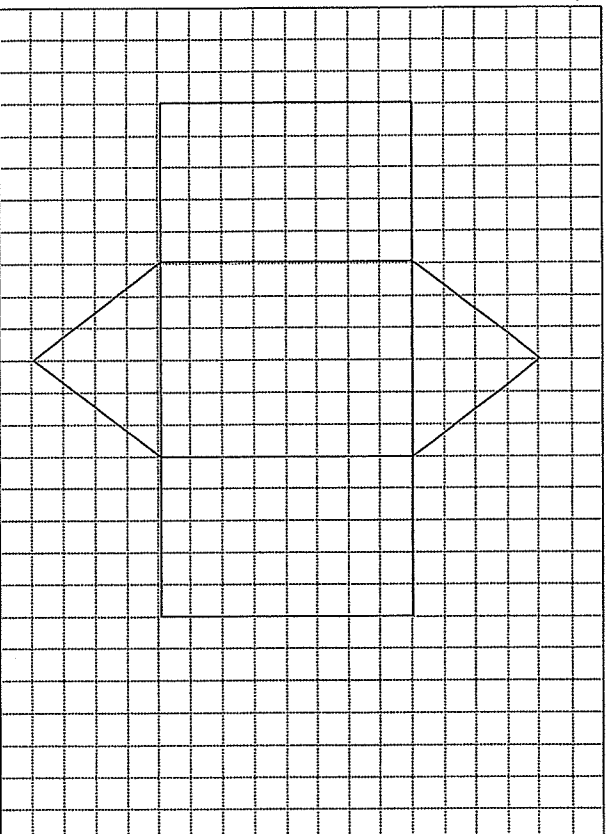
What is the shape of the base(s)? _____ How many bases? _____

What is the shape of the lateral faces? _____ How many lateral faces? _____

Calculate the surface area for this figure:

The surface area of this _____ is _____.

4.



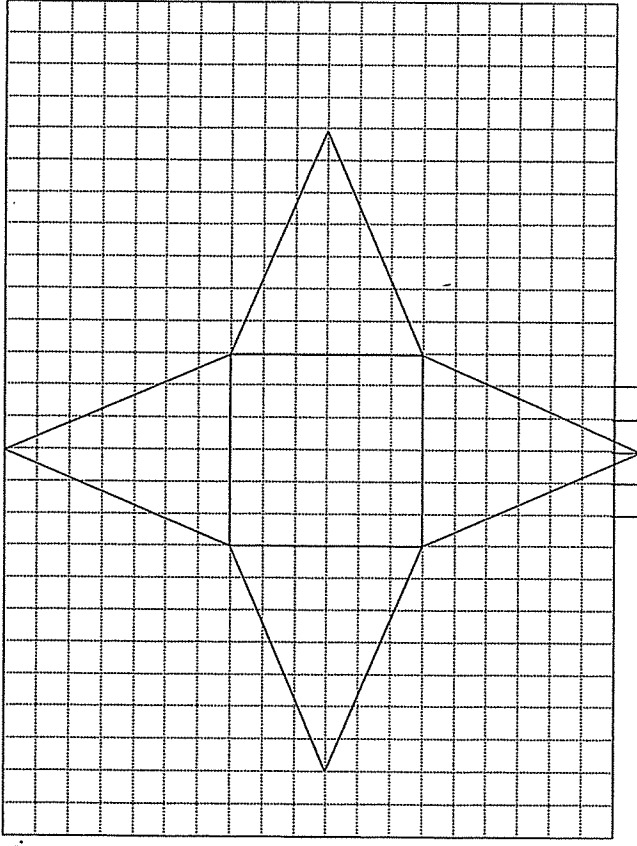
What is the name of this figure? _____

What is the shape of the base(s)? _____ How many bases? _____

What is the shape of the lateral faces? _____ How many lateral faces? _____

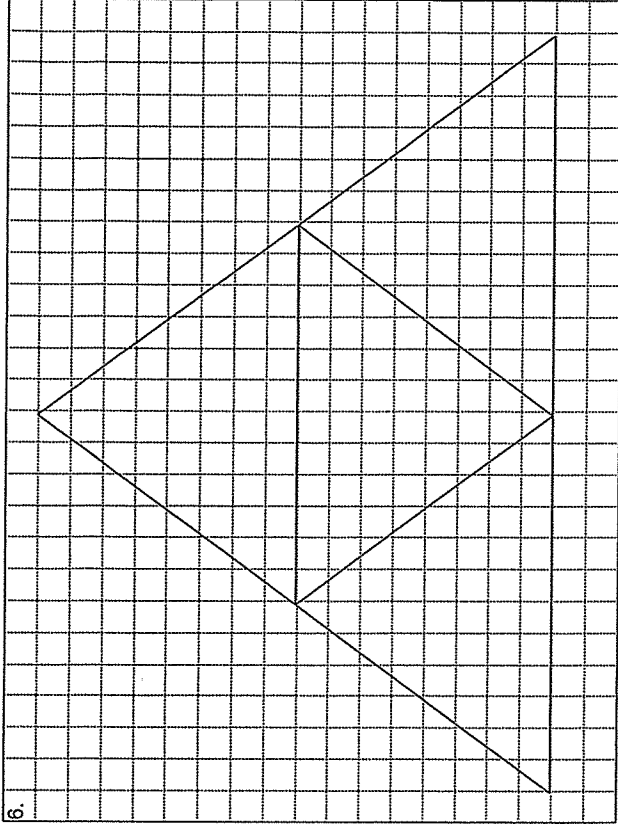
Calculate the surface area for this figure:

The surface area of this _____ is _____.



- What is the name of this figure? _____
- What is the shape of the base(s)? _____ How many bases? _____
- What is the shape of the lateral faces? _____ How many lateral faces? _____
- Calculate the surface area for this figure:

The surface area of this _____ is _____.



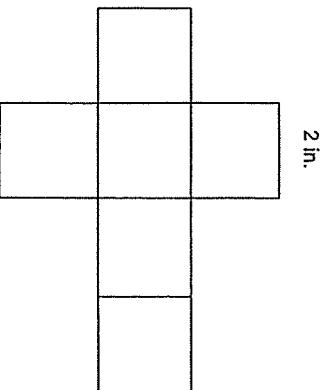
- What is the name of this figure? _____
- What is the shape of the base(s)? _____ How many bases? _____
- What is the shape of the lateral faces? _____ How many lateral faces? _____
- Calculate the surface area for this figure:

The surface area of this _____ is _____.

6.G.A.4 Name _____

Using Nets to Calculate Surface Area #6

1. This is a net of a cube.



What is the name of this figure? _____

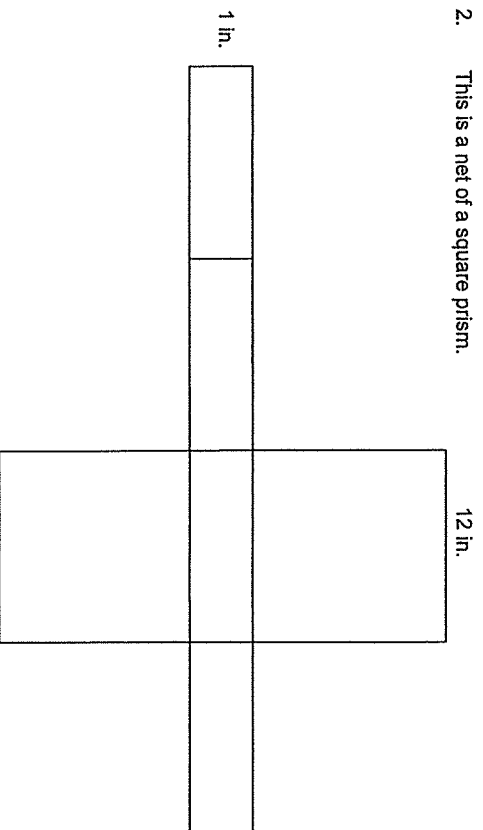
What is the shape of the base(s)? _____ How many bases? _____

What is the shape of the lateral faces? _____ How many lateral faces? _____

Calculate the surface area for this figure:

The surface area of this _____ is _____.

2. This is a net of a square prism.



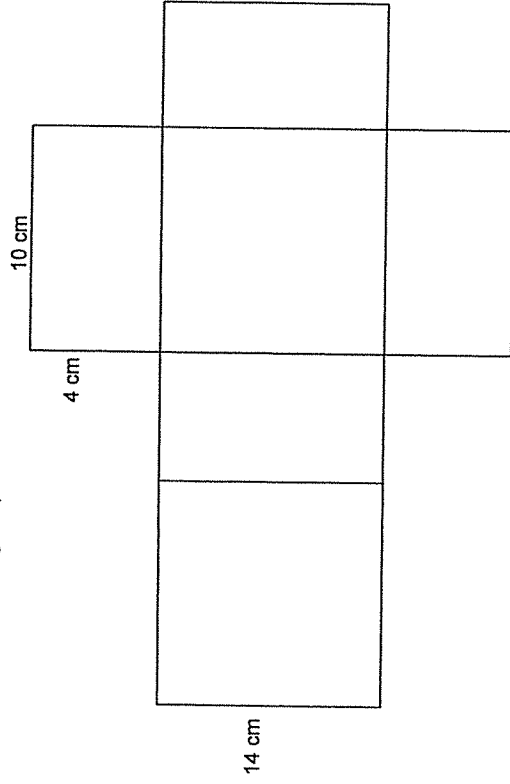
What is the shape of the base(s)? _____ How many bases? _____

What is the shape of the lateral faces? _____ How many lateral faces? _____

Calculate the surface area for this figure:

The surface area of this _____ is _____.

3. This is a net of a rectangular prism.



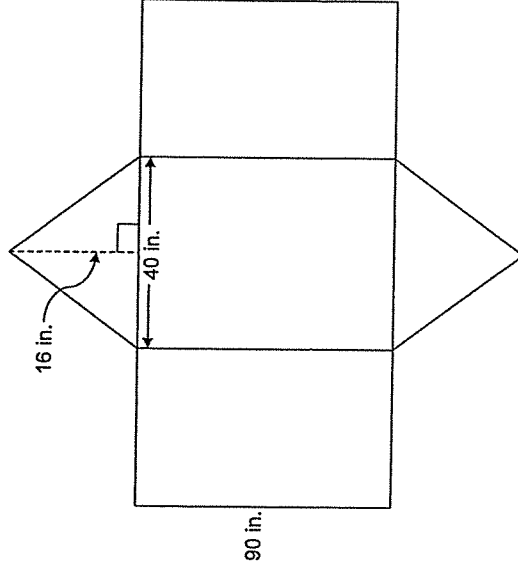
What is the shape of the base(s)? _____ How many bases? _____

What is the shape of the lateral faces? _____ How many lateral faces? _____

Calculate the surface area for this figure:

The surface area of this _____ is _____.

4. This is a net of a triangular prism.



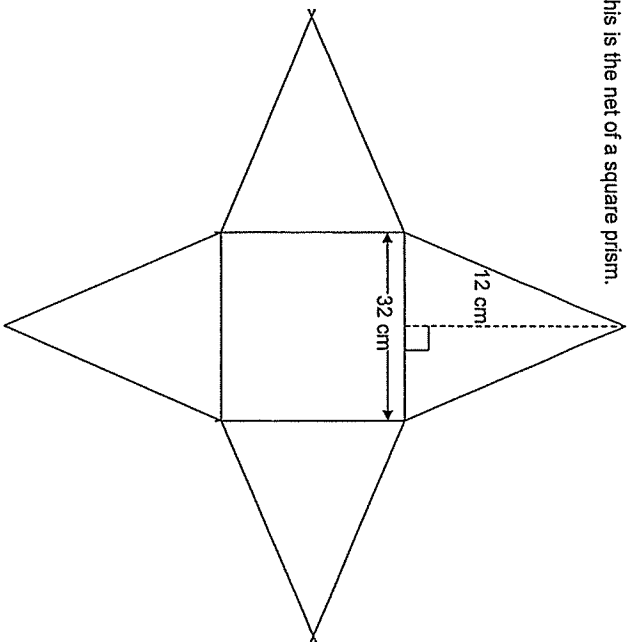
What is the shape of the base(s)? _____ How many bases? _____

What is the shape of the lateral faces? _____ How many lateral faces? _____

Calculate the surface area for this figure:

The surface area of this _____ is _____.

5. This is the net of a square prism.



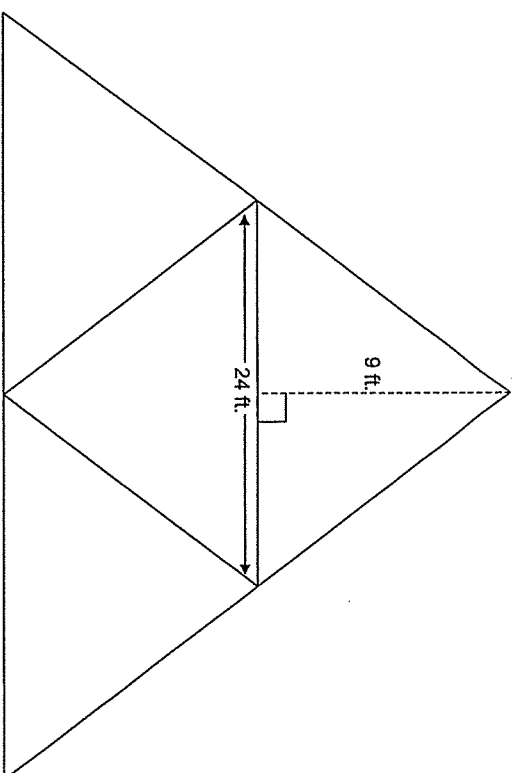
What is the shape of the base(s)? _____ How many bases? _____

What is the shape of the lateral faces? _____ How many lateral faces? _____

Calculate the surface area for this figure:

The surface area of this _____ is _____.

6. This is the net of a triangular prism.



What is the shape of the base(s)? _____ How many bases? _____

What is the shape of the lateral faces? _____ How many lateral faces? _____

Calculate the surface area for this figure:

The surface area of this _____ is _____.