

THREE-DIMENSIONAL SHAPES

A THREE-DIMENSIONAL SHAPES

A.1 IDENTIFYING FLAT OR SOLID SHAPES

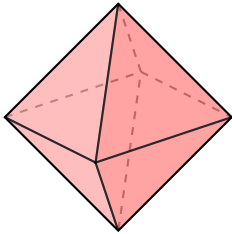
MCQ 1: Is this shape flat or solid?



Pick the right answer:

- ☐ 2D shape
- ☐ 3D shape

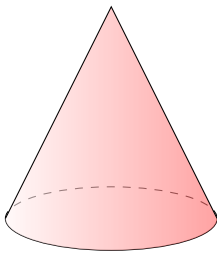
MCQ 2: Is this shape flat or solid?



Pick the right answer:

- ☐ 2D shape
- ☐ 3D shape

MCQ 3: Is this shape flat or solid?



Pick the right answer:

- ☐ 2D shape
- ☐ 3D shape

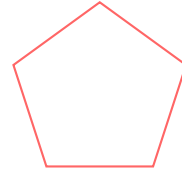
MCQ 4: Is this shape flat or solid?



Pick the right answer:

- ☐ 2D shape
- ☐ 3D shape

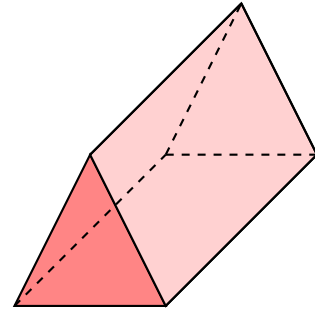
MCQ 5: Is this shape flat or solid?



Pick the right answer:

- ☐ 2D shape
- ☐ 3D shape

MCQ 6: Is this shape flat or solid?

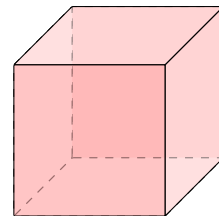


Pick the right answer:

- ☐ 2D shape
- ☐ 3D shape

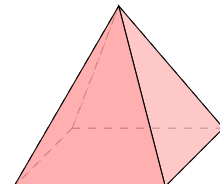
A.2 COUNTING FACES

Ex 7: How many faces does this cube have?



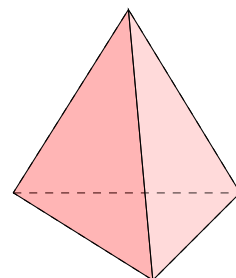
faces

Ex 8: How many faces does this square pyramid have?



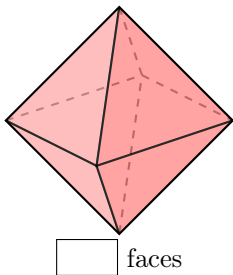
faces

Ex 9: How many faces does this triangular pyramid have?



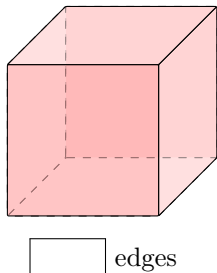
faces

Ex 10: How many faces does this eight-faced die have?

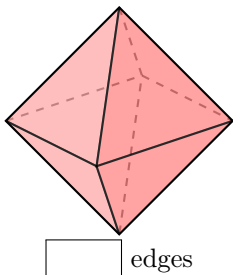


A.3 COUNTING EDGES

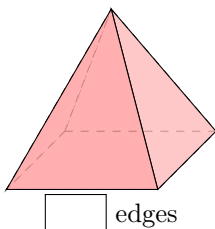
Ex 11: How many edges does this cube have?



Ex 12: How many edges does this eight-faced die have?

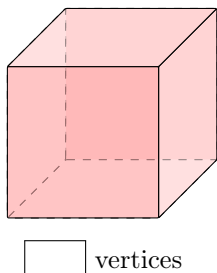


Ex 13: How many edges does this square pyramid have?

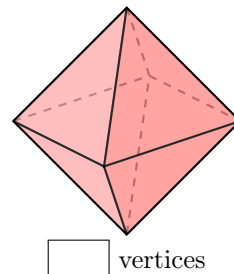


A.4 COUNTING VERTICES

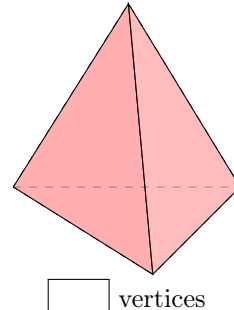
Ex 14: How many vertices does this cube have?



Ex 15: How many vertices does this eight-faced die have?



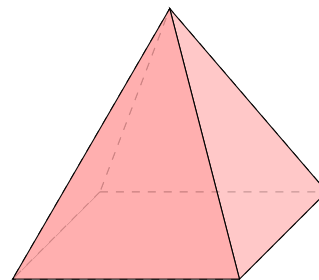
Ex 16: How many vertices does this triangular pyramid have?



B POLYHEDRON

B.1 IDENTIFYING POLYHEDRA

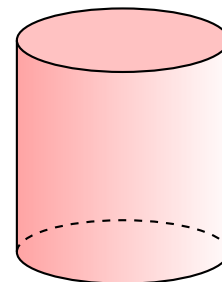
MCQ 17: Is this 3D figure a polyhedron?



Choose one answer:

- ☐ True
☐ False

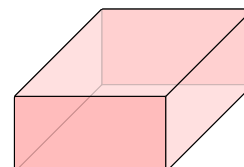
MCQ 18: Is this 3D figure a polyhedron?



Choose one answer:

- ☐ True
☐ False

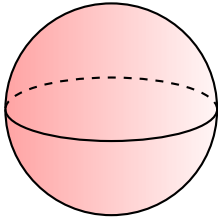
MCQ 19: Is this 3D figure a polyhedron?



Choose one answer:

- ☐ True
- ☐ False

MCQ 20: Is this 3D figure a polyhedron?



Choose one answer:

- ☐ True
- ☐ False

C CROSS SECTIONS

C.1 IDENTIFYING UNIFORM CROSS SECTION

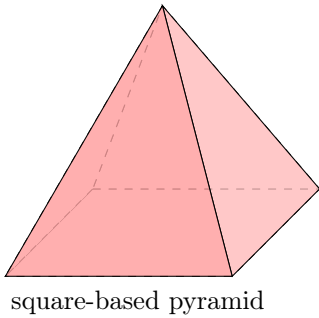
MCQ 21: Does this 3D shape have a uniform cross section?



Choose one answer:

- ☐ True
- ☐ False

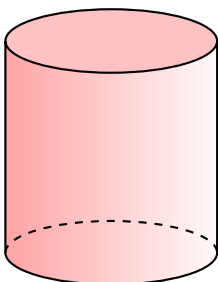
MCQ 22: Does this 3D shape have a uniform cross section?



Choose one answer:

- ☐ True
- ☐ False

MCQ 23: Does this 3D shape have a uniform cross section?



Choose one answer:

- ☐ True
- ☐ False

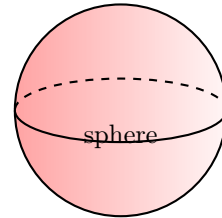
MCQ 24: Does this building have a uniform cross section?



Choose one answer:

- ☐ True
- ☐ False

MCQ 25: Does this 3D shape have a uniform cross section?



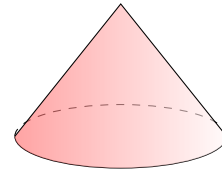
Choose one answer:

- ☐ True
- ☐ False

D CLASSIFICATION

D.1 CLASSIFYING 3D SHAPES

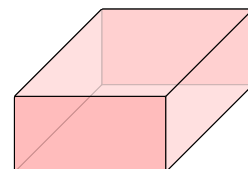
MCQ 26: Which 3D shape is shown below?



Choose one answer:

- ☐ Cone
- ☐ Cylinder
- ☐ Triangular prism

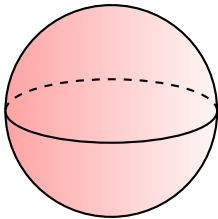
MCQ 27: Which 3D shape is shown below?



Choose one answer:

- ☐ Cone
- ☐ Triangular prism
- ☐ Rectangular prism

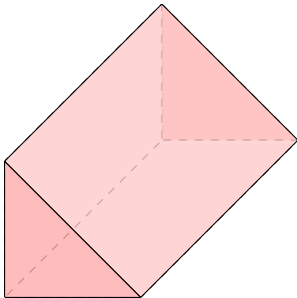
MCQ 28: Which 3D shape is shown below?



The shape above matches this description.

- ☐ Cone
- ☐ Sphere
- ☐ Cylinder

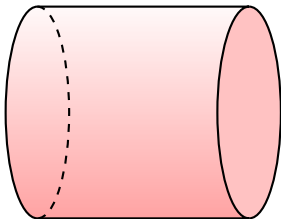
MCQ 29: Which 3D shape is shown below?



Choose one answer:

- ☐ Cylinder
- ☐ Triangular prism
- ☐ Rectangular prism

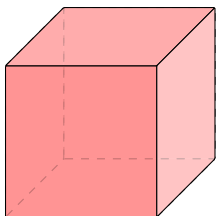
MCQ 30: Which 3D shape is shown below?



Choose one answer:

- ☐ Cylinder
- ☐ Cone
- ☐ Sphere

MCQ 31: Which 3D shape is shown below?



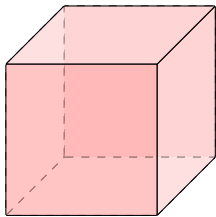
Choose one answer:

- ☐ Rectangular pyramid
- ☐ Square pyramid
- ☐ Cube

E DRAWING THREE-DIMENSIONAL SHAPES

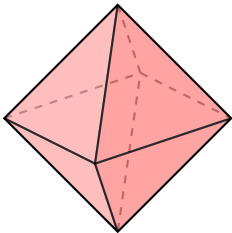
E.1 COUNTING VISIBLE AND HIDDEN EDGES

Ex 32: Count the number of visible and hidden edges on this cube



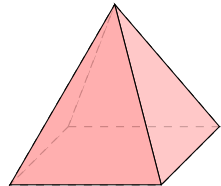
- visible edges
- hidden edges

Ex 33: Count the number of visible and hidden edges on this eight-faced die.



- visible edges
- hidden edges

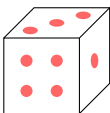
Ex 34: Count the number of visible and hidden edges on this square Pyramid.



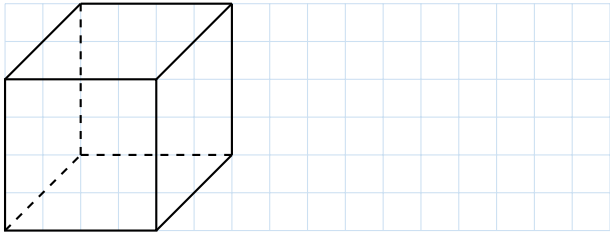
- visible edges
- hidden edges

E.2 DRAWING THREE-DIMENSIONAL SHAPES

Ex 35:



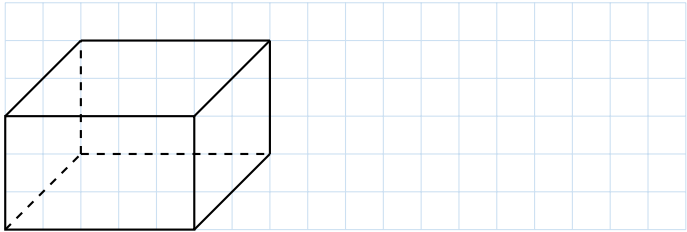
Draw this cube on your graph paper.



Ex 36:



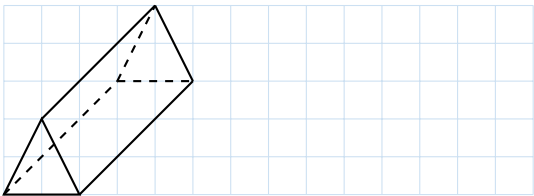
Draw this solid on your graph paper.



Ex 37:



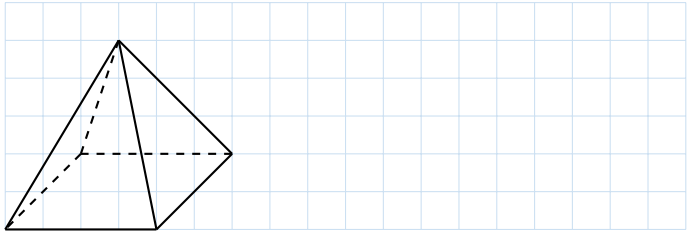
Draw this triangular prism on your graph paper.



Ex 38:



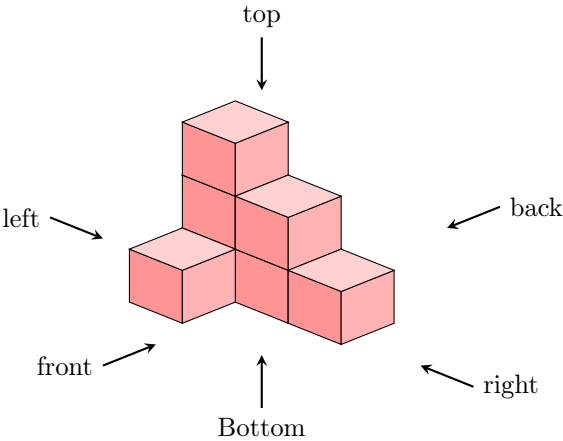
Draw this pyramid on your graph paper.



F MULTI-VIEW PROJECTION

F.1 FINDING THE PROJECTION

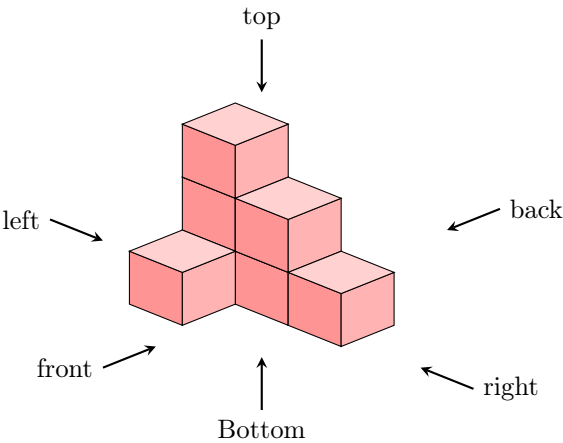
MCQ 39: Identify the front view of this solid.



Choose one answer:

- ☐
- ☐
- ☐
- ☐

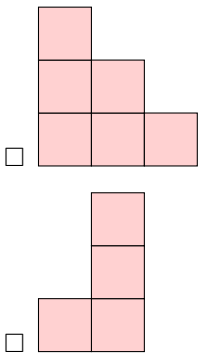
MCQ 40: Identify the top view of this solid.



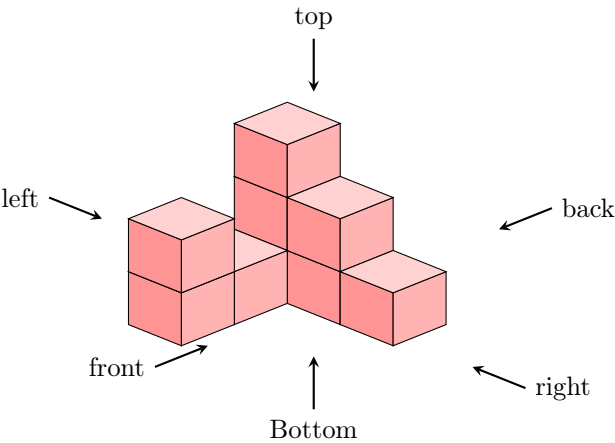
Choose one answer:

- ☐
- ☐

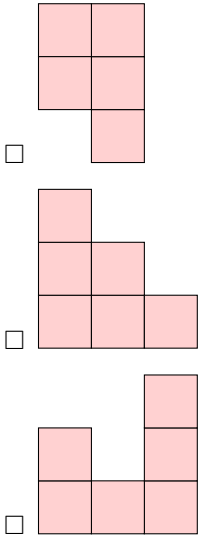




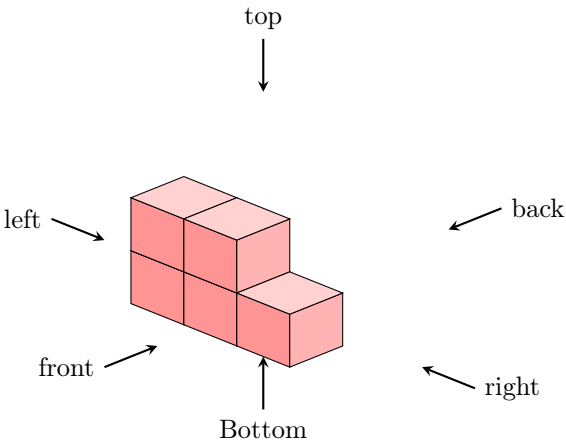
MCQ 41: Identify the right view of this solid.



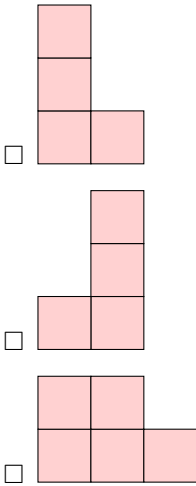
Choose one answer:



MCQ 42: Identify the front view of this solid.

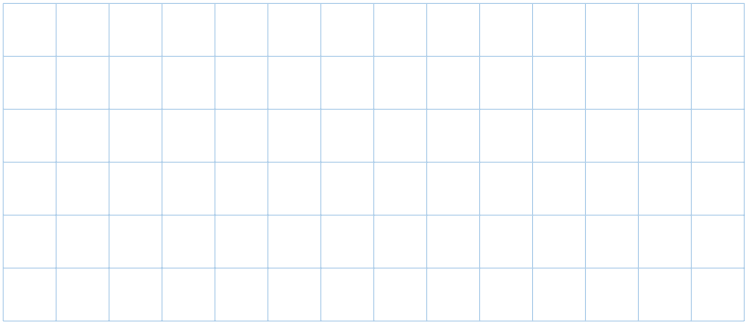
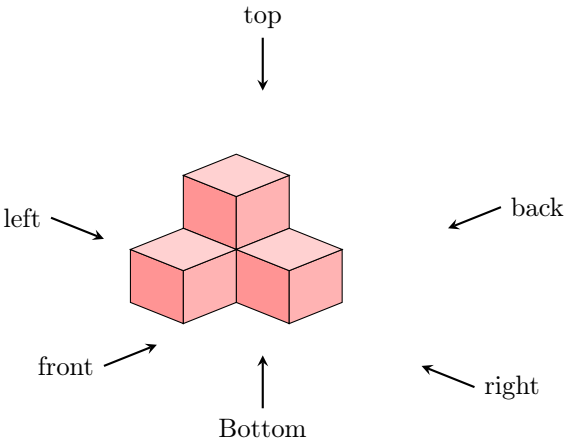


Choose one answer:

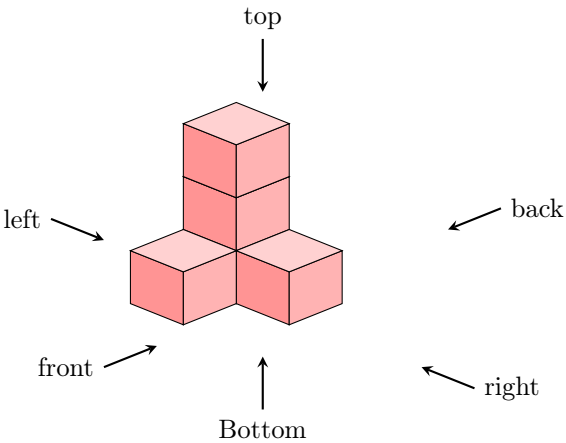


F.2 DRAWING THE PROJECTION

Ex 43: Draw the front view of this solid on your graph paper.



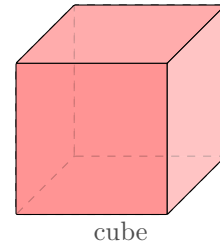
Ex 44: Draw the right view of this solid on your graph paper.



G SOLID CONSTRUCTIONS

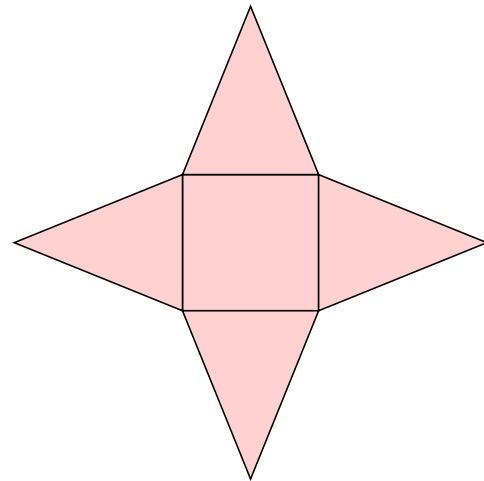
G.1 IDENTIFYING NETS

MCQ 47: Identify the net that can be folded to form this 3D shape.

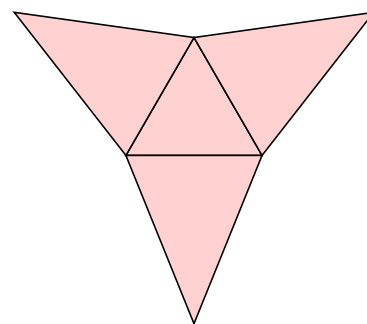


cube

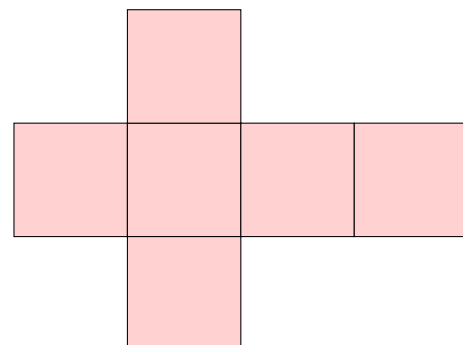
Choose one answer:



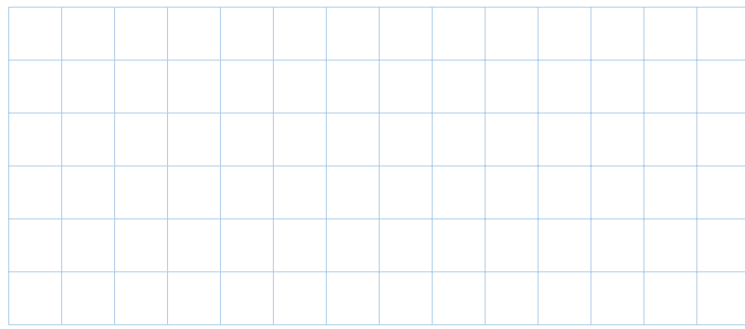
☐



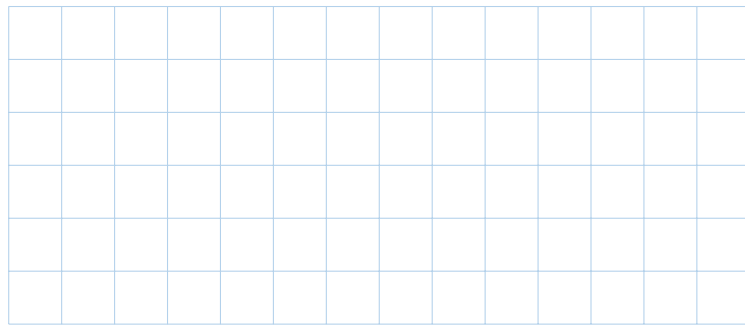
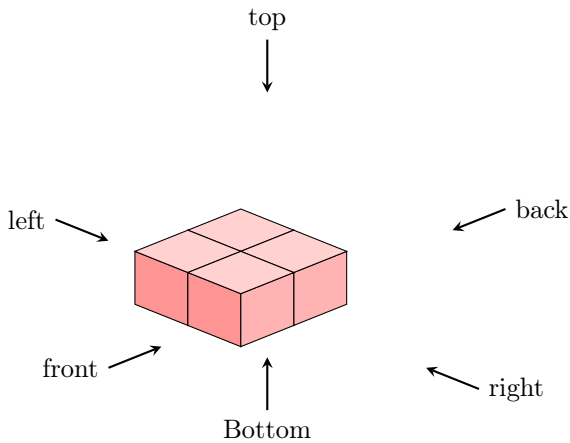
☐



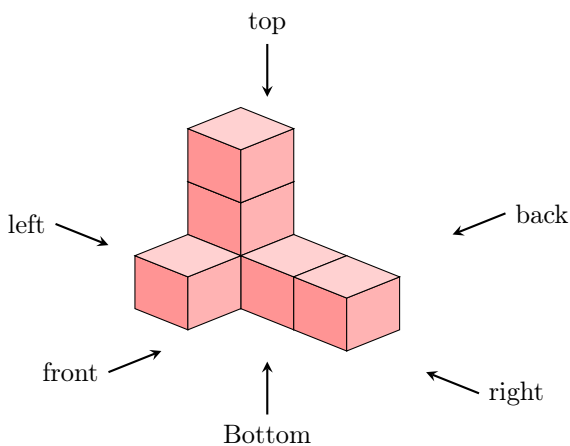
☐

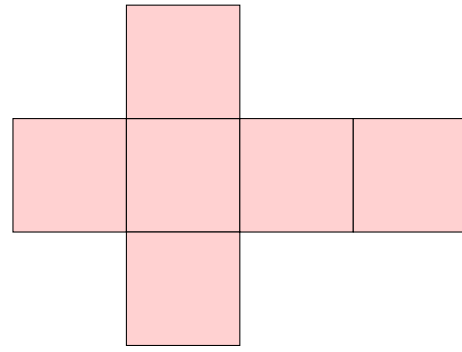
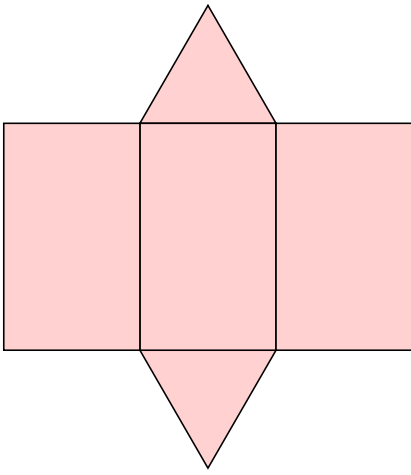


Ex 45: Draw the top view of this solid on your graph paper.

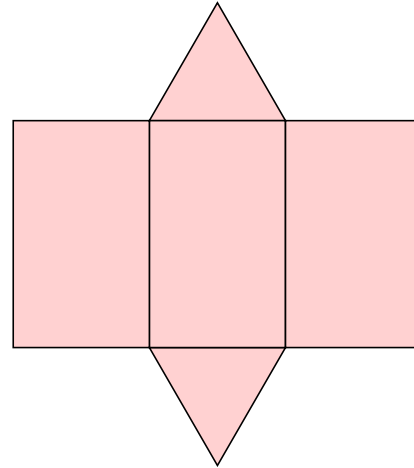
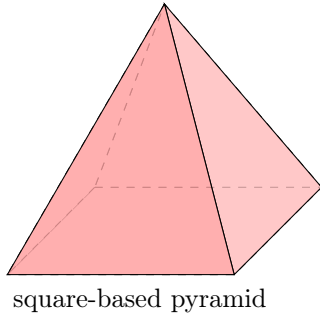


Ex 46: Draw the front view of this solid on your graph paper.



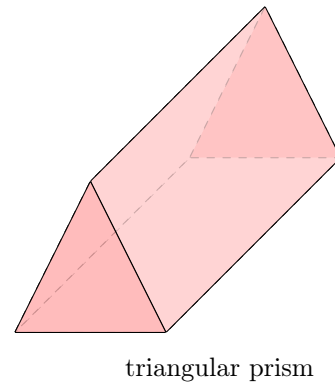
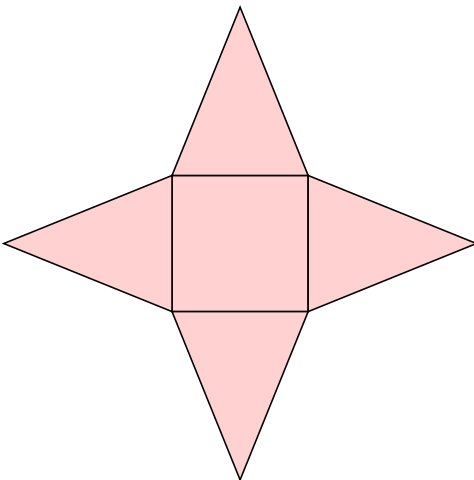


MCQ 48: Identify the net that can be folded to form this 3D shape.

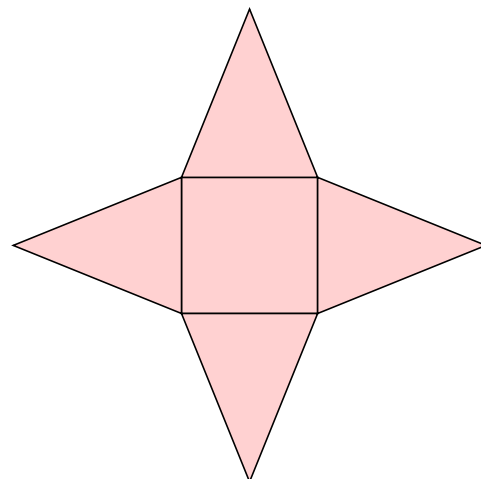
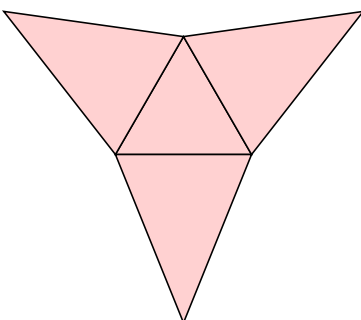


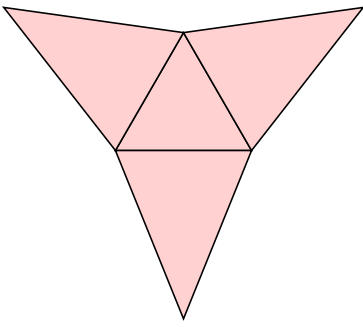
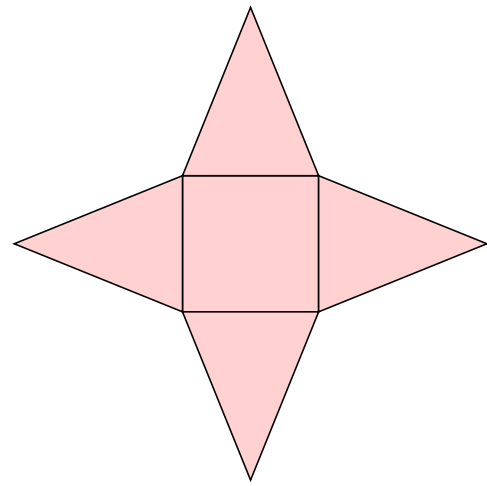
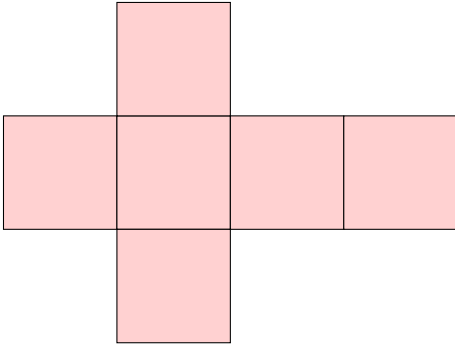
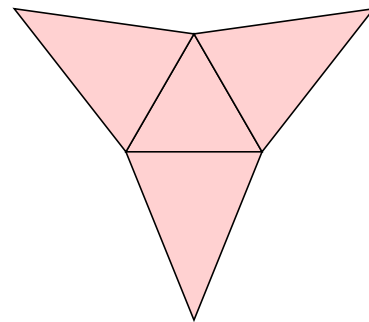
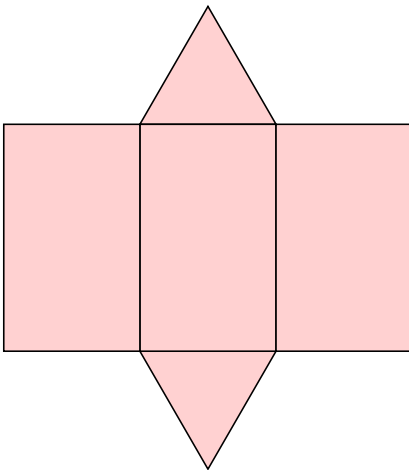
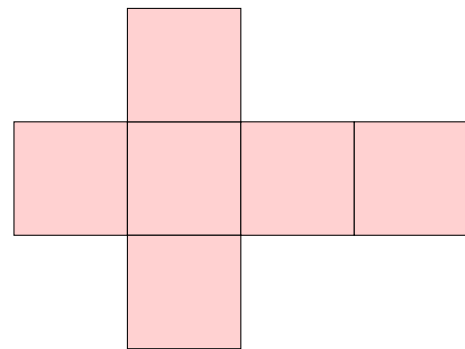
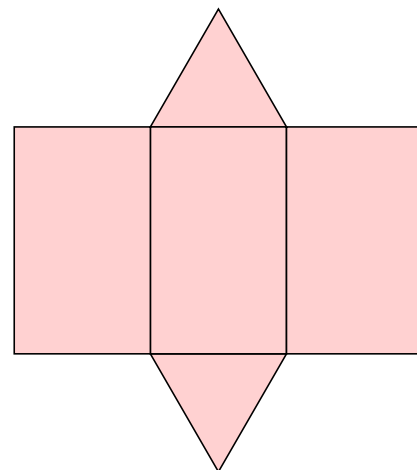
MCQ 49: Identify the net that can be folded to form this 3D shape.

Choose one answer:

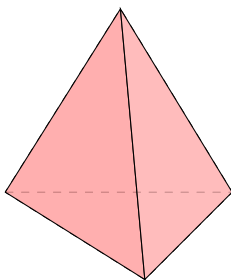


Choose one answer:




☐

☐

☐

☐

☐

☐

☐

MCQ 50: Identify the net that can be folded to form this 3D shape.

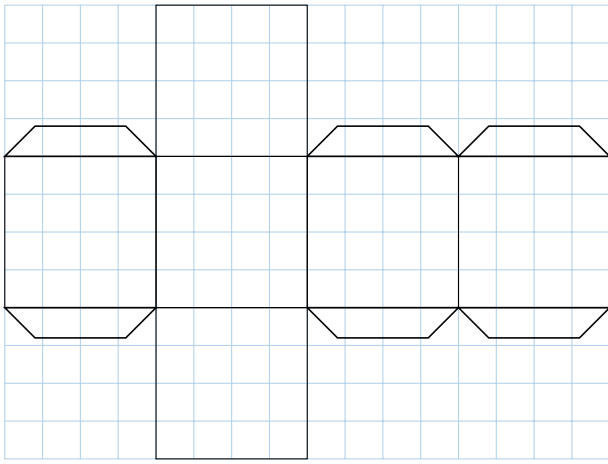


tetrahedron

Choose one answer:

G.2 CONSTRUCTING 3D SOLIDS FROM PAPER

Ex 51: Draw this net on graph paper. Cut it out (keeping the tabs), fold it, and glue the tabs to form a cube. You can decorate its different faces. I look forward to seeing your photographs.



Ex 52: Draw this net on graph paper. Cut it out (keeping the tabs), fold it, and glue the tabs to form a square-based pyramid. You can decorate its different faces. I look forward to seeing your photographs.

