THREE-DIMENSIONAL SHAPES

A THREE-DIMENSIONAL SHAPES

A.1 IDENTIFYING FLAT OR SOLID SHAPES
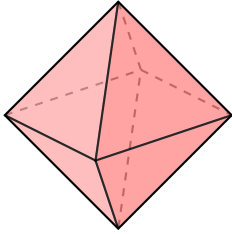
MCQ 1: Is this shape flat or solid?

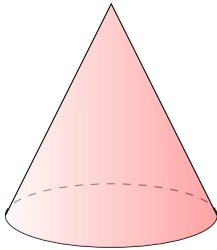**Pick the right answer:**

☐ 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?
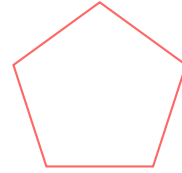

Pick the right answer:

☐ 2D shape

☐ 3D shape

MCQ 4: Is this shape flat or solid?

Pick the right answer:
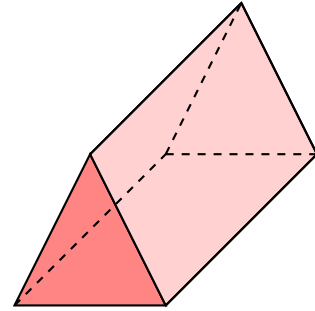
☐ 2D shape

☐ 3D shape

MCQ 5: Is this shape flat or solid?

Pick the right answer:

☐ 2D shape

☐ 3D shape
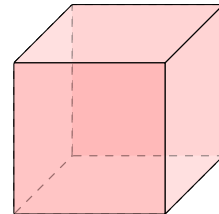
MCQ 6: Is this shape flat or solid?

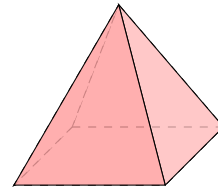**Pick the right answer:**

☐ 2D shape

☐ 3D shape

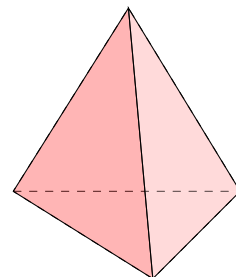### A.2 COUNTING FACES

Ex 7: How many faces does this cube have?

[   ] faces
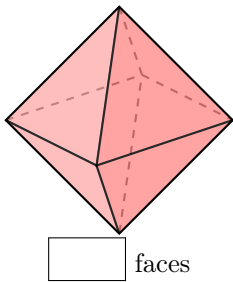
Ex 8: How many faces does this square Pyramid have?

[   ] faces

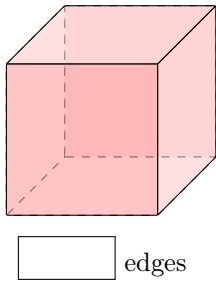**Ex 9:** How many faces does this triangular pyramid have?

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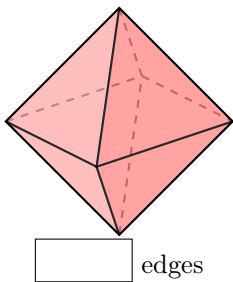
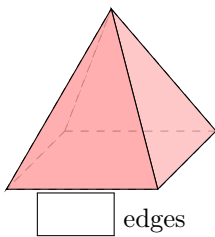**Ex 10:** How many faces does this eight-faced die have?

[____] faces

A.3 COUNTING EDGES

Ex 11: How many edges does this cube have?

[____] edges

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

[____] edges

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

[____] edges

A.4 COUNTING VERTICES

Ex 14: How many vertices does this cube have?
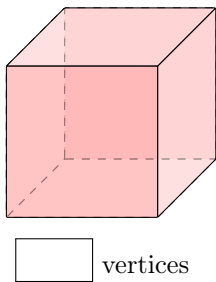
[____] vertices

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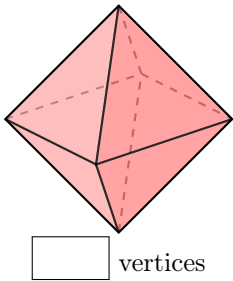
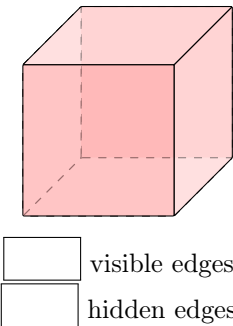[____] vertices

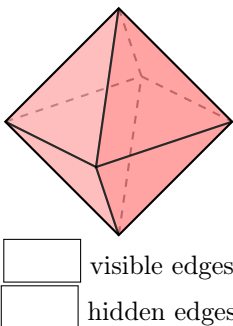**Ex 16:** How many vertices does this triangular pyramid have?

[____] vertices
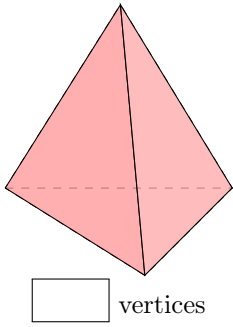
B DRAWING THREE-DIMENSIONAL SHAPES

B.1 COUNTING VISIBLE AND HIDDEN EDGES

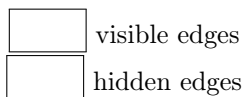**Ex 17:** Count the number of visible and hidden edges on this cube

[____] visible edges
[____] hidden edges

Ex 18: Count the number of visible and hidden edges on this eight-faced die.

[____] visible edges
[____] hidden edges

Ex 19: Count the number of visible and hidden edges on this square Pyramid.

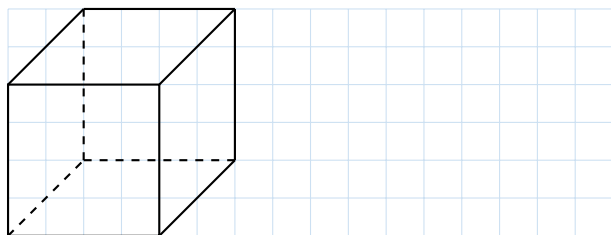|	visible edges
	hidden edges
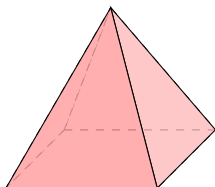
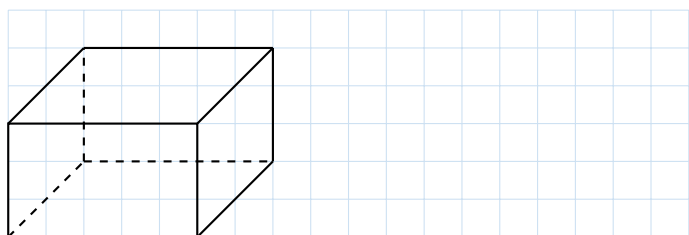## B.2 DRAWING THREE-DIMENSIONAL SHAPES

Ex 20:
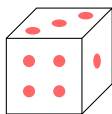
Draw this cube on your graph paper.
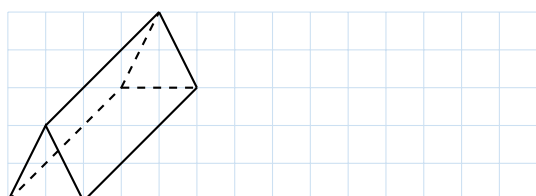
Ex 21:

Draw this cube on your graph paper.
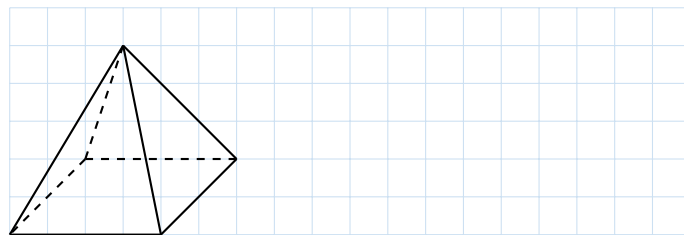
Ex 22:

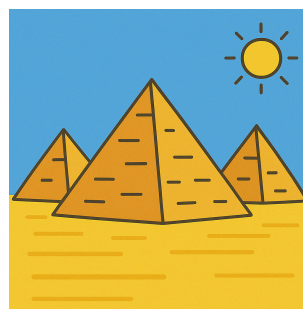Draw this triangular prism on your graph paper.

Ex 23:

Draw this pyramid on your graph paper.

C CLASSIFICATION

C.1 FINDING THE SHAPES

Ex 24: Can you find all the pyramids in the picture?

	pyramids

Ex 25: Can you find all the cubes in the picture?

	cubes

Ex 26: Can you find all the spheres in the picture?
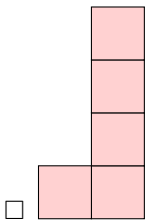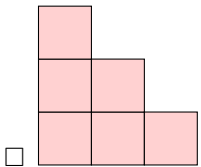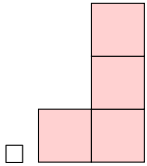

	spheres

D MULTI-VIEW PROJECTION

D.1 FINDING THE PROJECTION
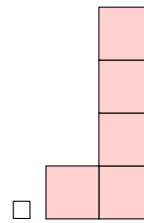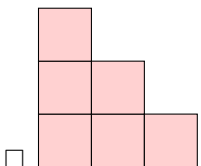
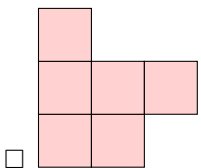**MCQ 27:** Identify the front view of this solid.

left ← → top → back

front ← ↑ → right

Bottom
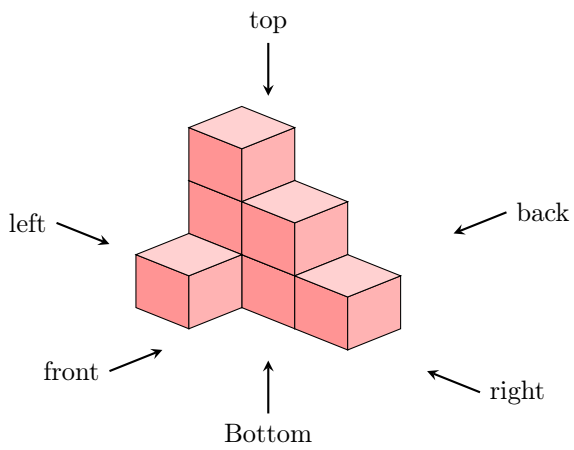
Choose one answer:

□

□

□

MCQ 28: Identify the top view of this solid.

top

left ← → back

front ← ↑ → right

Bottom
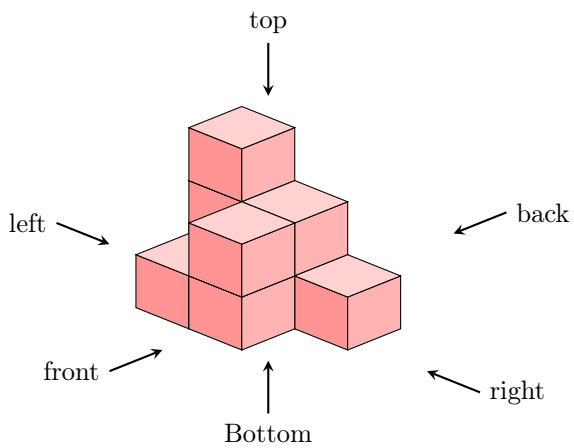
Choose one answer:

□

□

MCQ 29: Identify the right view of this solid.

top

left ← → back

front ← ↑ → right

Bottom
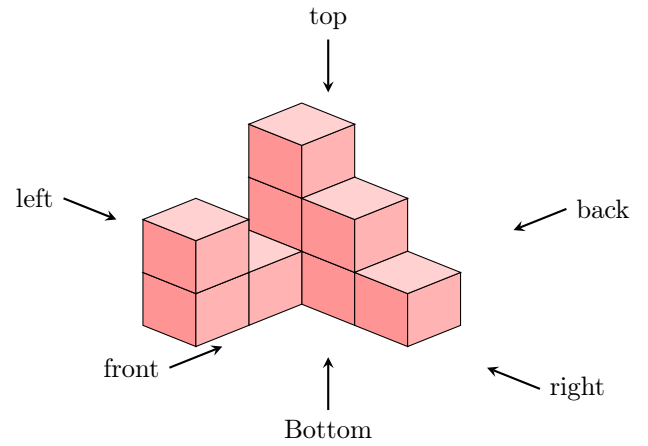
Choose one answer:

□

□

□

MCQ 30: Identify the front view of this solid.

top

left ← → back

front ← ↑ → right

Bottom
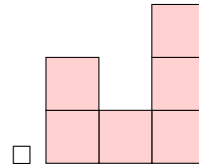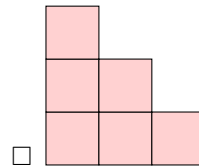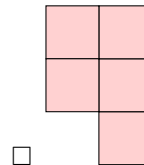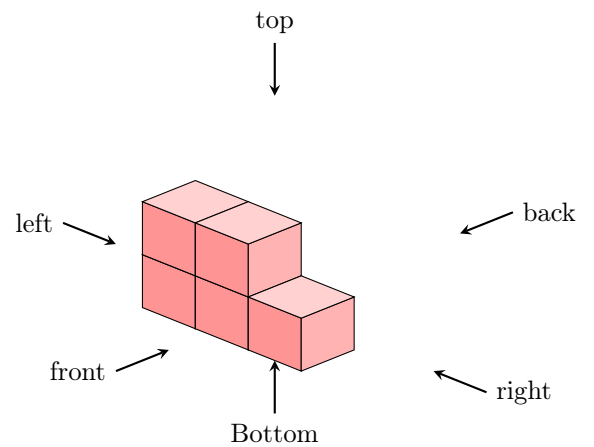
Choose one answer:

□

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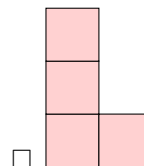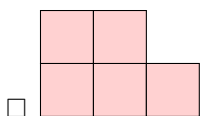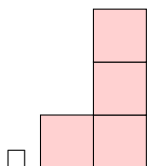
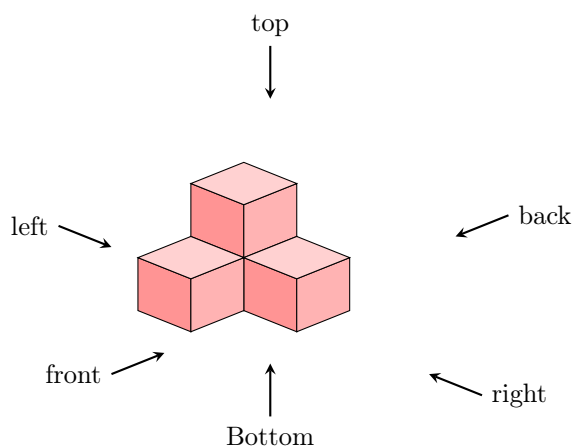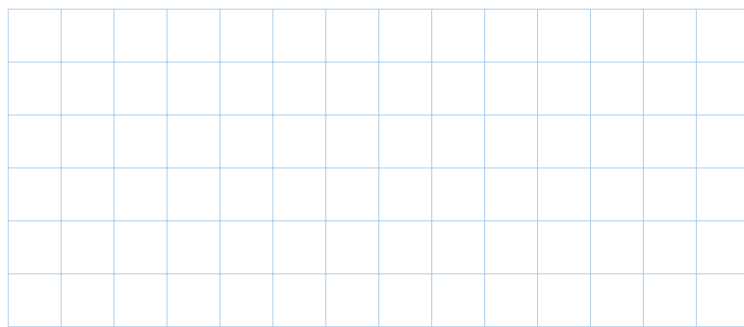## D.2 DRAWING THE PROJECTION

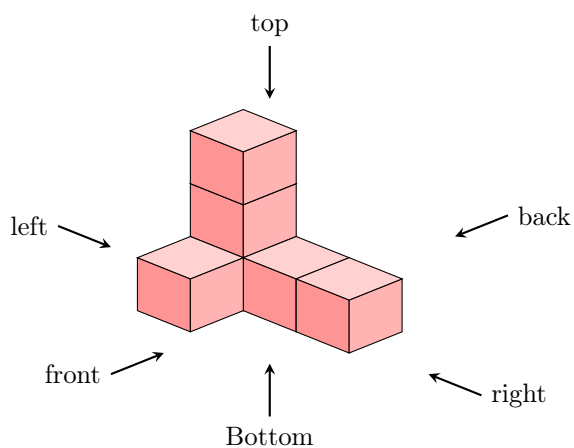**Ex 31:** Draw the front view of this solid on your graph paper.

top

left   back

front   right

Bottom

Ex 32: Draw the right view of this solid on your graph paper.

top

left   back

front   right

Bottom
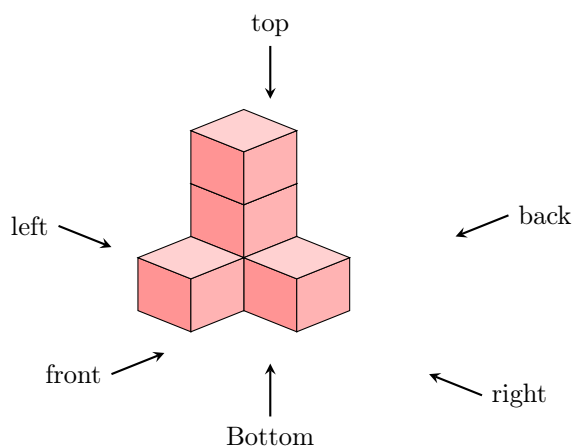
Ex 33: Draw the top view of this solid on your graph paper.

top

left   back

front   right

Bottom

Ex 34: Draw the front view of this solid on your graph paper.

top

left   back

front   right
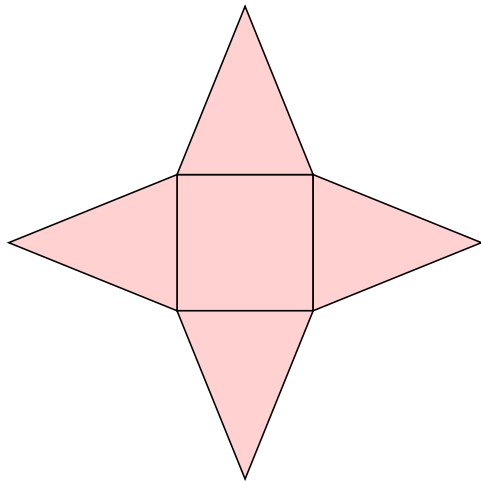
Bottom
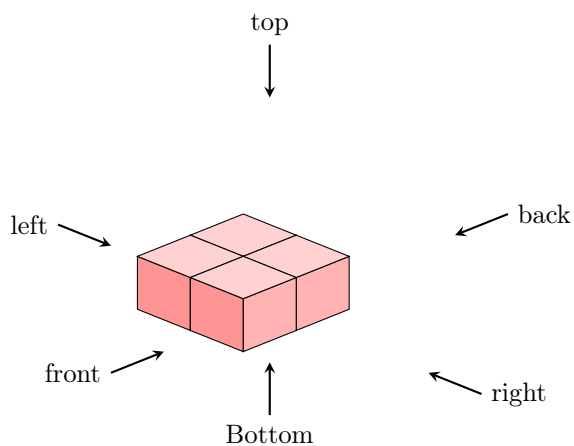
E SOLID CONSTRUCTIONS

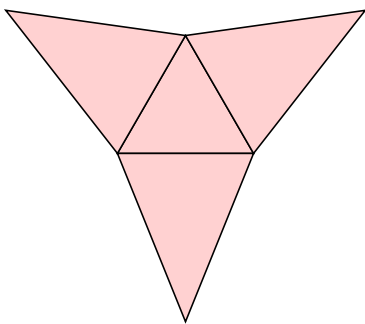## E.1 IDENTIFYING NETS

MCQ 35: Identify the net that can be folded to form this 3D shape.
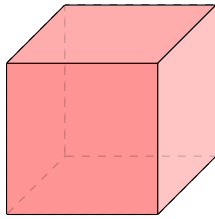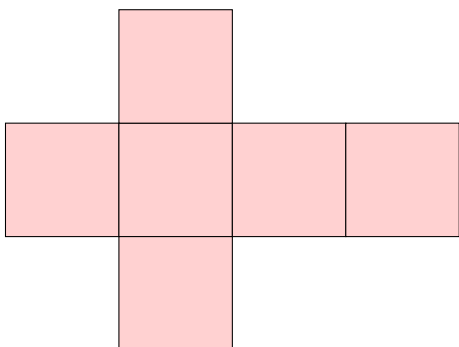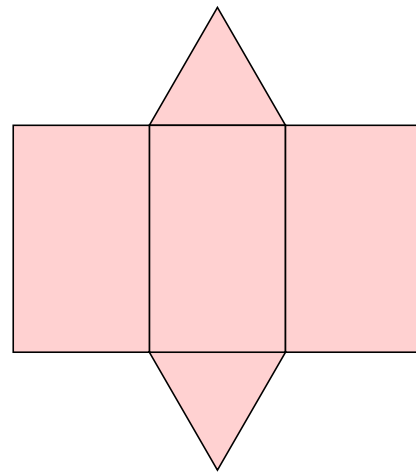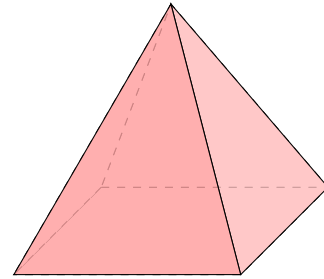

cube

Choose one answer:

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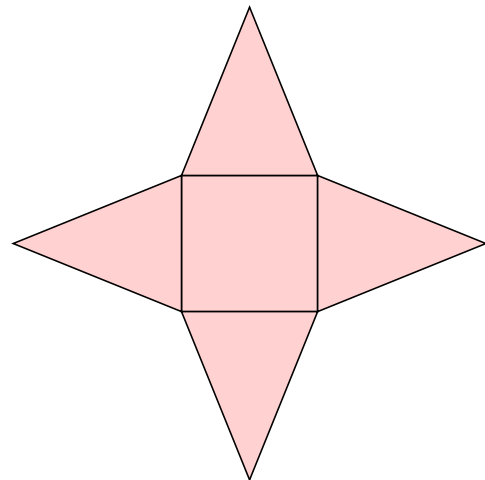
☐

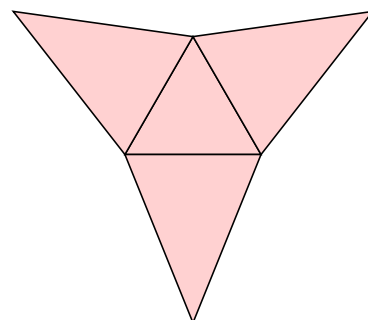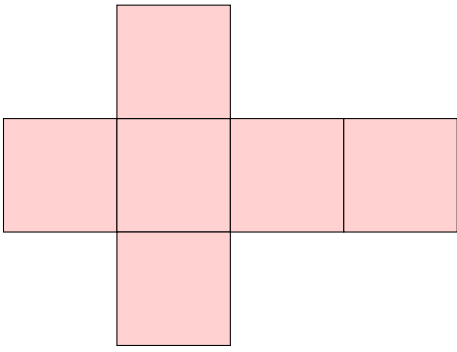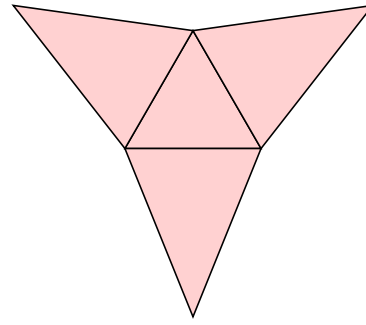**MCQ 36:** Identify the net that can be folded to form this 3D shape.
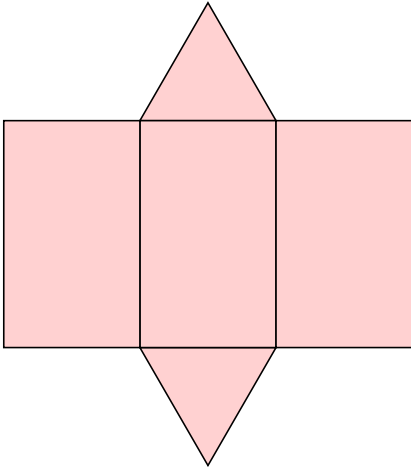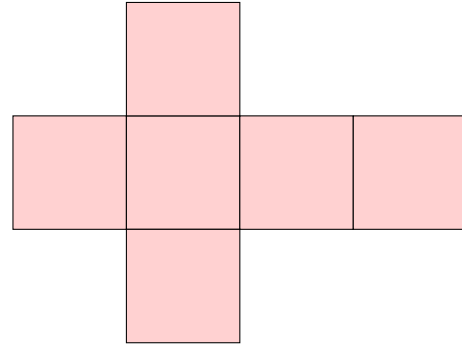

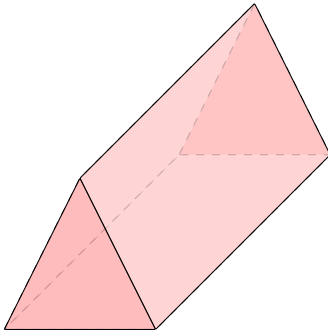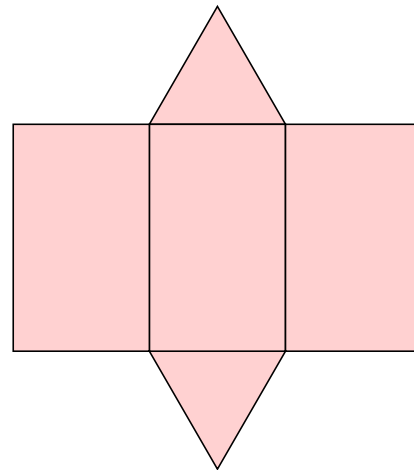square-based pyramid

Choose one answer:
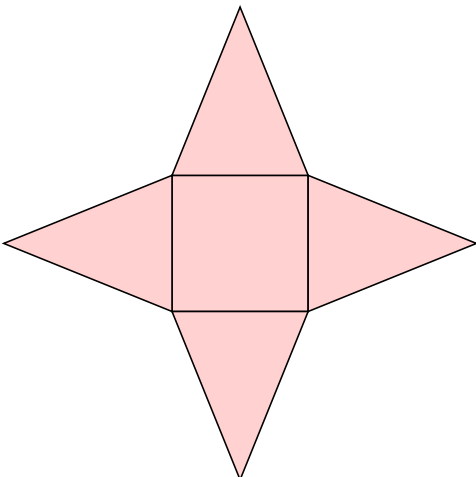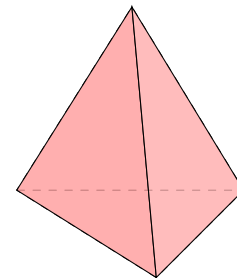

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MCQ 37: Identify the net that can be folded to form this 3D shape.

triangular prism

Choose one answer:

□

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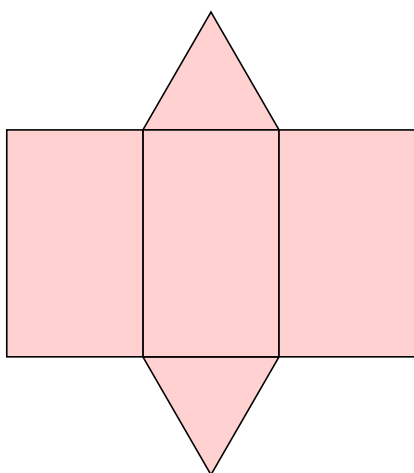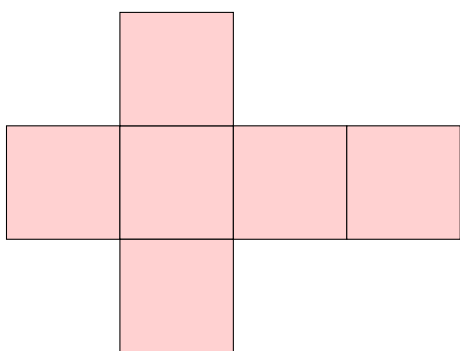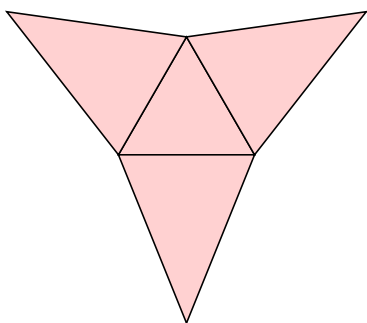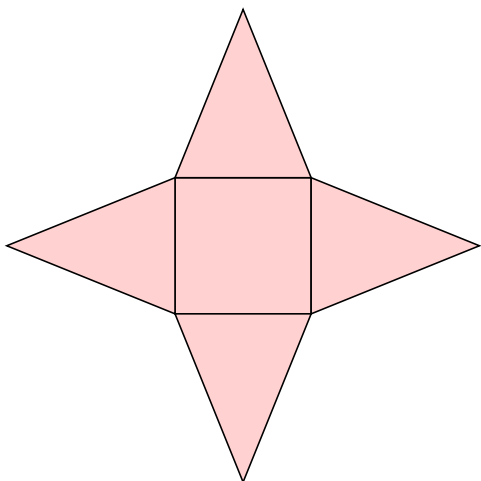**MCQ 38:** Identify the net that can be folded to form this 3D shape.
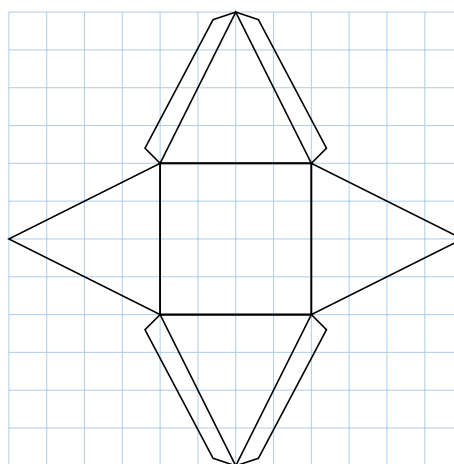
tetrahedron

Choose one answer:

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☐

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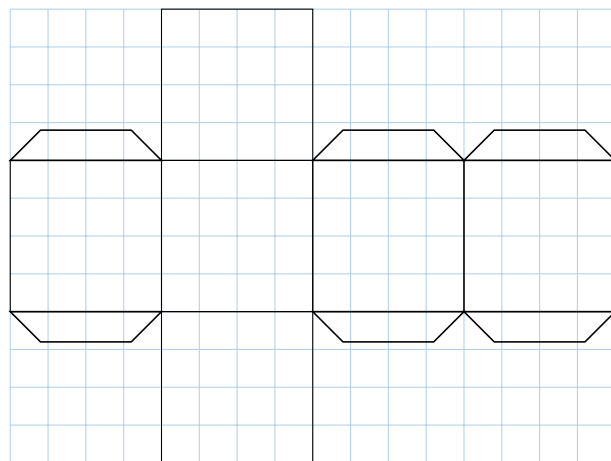
Ex 40: Draw this net on graph paper. Cut it out (keeping the tabs), fold it, and glue the tabs to form a square-based pyramid. You can decorate its different faces. I look forward to seeing your photographs.

E.2 CONSTRUCTING 3D SOLIDS FROM PAPER

Ex 39: 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.