TB(3A) Ch.6 More about 3-D Figures Multiple Choice Questions

1. [16-17 Final Exam #6]

If a cube is made by folding up the following net, what is the letter on the opposite side of *A*?

- **A.** *C*
- **B.** *D*
- **C.** *E*
- **D.** *F*

2. [16-17 Final Exam #7]

If a polyhedron has 7 vertices and 13 edges, how many faces does it have?

- **A.** 4
- **B.** 8
- **C.** 18
- **D.** 20
- 3. [17-18 S Test 2 #2]

How many planes of reflection and axes of rotational symmetry are there for a regular tetrahedron?

	Planes of reflection	Axes of rotational symmetry
A.	4	6
B.	4	7
C.	6	6
D.	6	7

4. [17-18 S Test 2 #3]

The following solid is made up of small identical cubes. Assume that there are no hidden parts in the figure, which of the following is the side view of the given solid?



A.

B.



C.





5. [17-18 S Test 2 #8]

In the figure, VABCD is a right pyramid with the square base ABCD. E is the mid-point of VB. F is a point lying on VB such that AF and CF are perpendicular to VB. The angle between the plane VAB and the plane VBC is



- **B.** $\angle ABC$.
- **C.** $\angle AEC$.
- **D.** $\angle AVC$.

6. [17-18 Final Exam #4]

The figure shows a prism *ABCDFE* with base of a right-angled triangle. What is the projection of *GE* on plane *ABCD*?



A.*BC* **B.***BE* **C.***GB* **D.***GC*

7. [17-18 Final Exam #15]

It is given that $\triangle ABC$, $\triangle BCD$, $\triangle CDE$ and $\triangle DEF$ are equilateral triangles. If the following net is folded into a solid, which of the followings are true?



- I. Point *B* will coincide with point *F*.
- II. Edge AB will coincide with edge EF.
- III. The solid has 7 axes of rotational symmetry.
- A. I and II only
- **B.** I and III only
- C. II and III only
- **D.** I, II and III

8. [18-19 S Test 2 #3]

If a cube is made by folding up the following net, which of the following letter is on the opposite side of F?

- **A.** *A*
- **B.** *B*
- **C.** *D*
- **D.** *E*

9. [18-19 S Test 2 #7]

The figure shows a cuboid which its length, width and height are all different. Which of the following statements about the cuboid must be correct?

- I. There are 5 planes of reflection.
- II. There are 3 axes of rotational symmetry.
- III. All axes of rotational symmetry pass through the same point.
- A. I and II only
- **B.** I and III only
- **C.** II and III only
- **D.** I, II and III

10. [18-19 Final Exam #7]

How many axes of rotational symmetry are there in a right regular octagonal prism?

- **A.** 6
- **B.** 7
- **C.** 8
- **D.** 9

11. [18-19 Final Exam #16]

When the net in the figure is folded into a solid, which of the following pairs of points will coincide?

- I. B and HII. C and EIII. D and F
- A. I and II only
- **B.** I and III only
- **C.** II and III only
- **D.** I, II and III





How many axes of rotational symmetry are there for a cube?

- **A.** 7
- **B.** 9
- **C.** 10
- **D.** 13

13. [20-21 Standardized Test #2]

If a cube is made by folding up the following net, what is the letter on the face which is opposite to the face with the letter *F*?

- **A.** *A*
- **B.** *B*
- **C.** *C*
- **D.** *D*

14. [20-21 Standardized Test #3]

The figures below show two solids. Which of the following are true?





- I. The two solids have the same top view.
- II. The two solids have the same front view.
- III. The two solids have the same side view.
- A. I and II only
- **B.** I and III only
- C. II and III only
- **D.** I, II and III

Α

В

С

D

Ε

F

15. [20-21 Final Exam #5]

If the net below is folded into a tetrahedron, which edge will coincide with CD?

- **A.** *AF*
- **B.** *BC*
- **C.** *DE*
- **D.** *EF*

16. [20-21 Final Exam #7]

In the figure, *ABCD* is a square. The diagonals *AC* and *BD* intersect at *E*. $\triangle DEF$ is an equilateral triangle. Find $\angle AGE$.

- **A.** 100°
- **B.** 105°
- **C.** 112.5°
- **D.** 120°

17. [20-21 Final Exam #16]

In the figure, *ABCDEF* is a right triangular prism and $\triangle ABC$ is a right-angled triangle. *G* and *H* are the mid-points of *BC* and *ED* respectively. The angle between *AG* and the plane *BCDE* is

- A. ∠AGC.
- **B.** ∠*AGB*.
- C. $\angle AGE$.
- **D.** ∠*AGH*.

~ End ~



