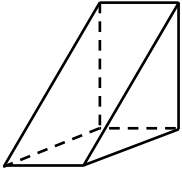# TB(1A) Ch. 6 Introduction to Geometry
Multiple Choice Questions
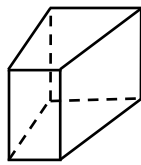
1.   [11-12 Standardized Test 2 Q5]

Which of the following figures have uniform cross-sections?

I.   II.

III.   IV.

A.   I and II only

B.   I, II and III only

C.   I, III and IV only

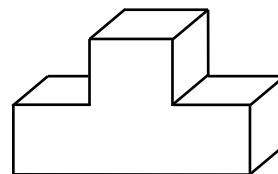**D.**   II, III and IV only

2.   [11-12 Standardized Test 2 Q7]

In $\triangle ABC$, $\angle A = \angle B + 1°$ and $\angle B = \angle C + 1°$. Which type of triangle does $\triangle ABC$ belong to?

A.   Acute-angled triangle

B.   Equilateral triangle

C.   Obtuse-angled triangle

D.   Right-angled triangle

3. [12-13 Standardized Test 2 Q3]

The following prism has

A. 8 faces, 16 vertices and 16 edges.

B. 9 faces, 12 vertices and 24 edges.

C. 10 faces, 12 vertices and 16 edges.

D. 10 faces, 16 vertices and 24 edges.

4. [12-13 Standardized Test 2 Q4]
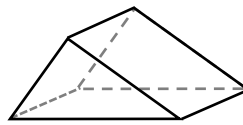
Which of the following statements is/are correct?

I.   A cylinder is a non-polyhedron.

II. A regular polyhedron has a different regular polygon on every face.

III. A concave polygon has only one of the interior angles being a reflex angle.

A. I only

B. II only

C. I and III only

D. II and III only

5. [12-13 Final Exam, 15]

The figure shows a triangular prism. What kind(s) of plane figure does/do its cross-section(s) belong to?

I. Triangle
II. Quadrilateral
III.Pentagon

A. I only   **B.** II only
C. I and II only   **D.** II and III only
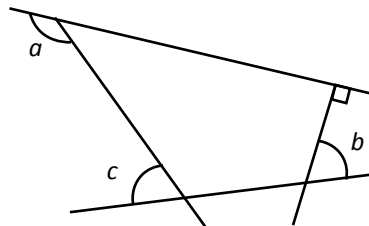
6. [13-14 Standardized Test 2 Q1]

Which of the following quadrilaterals must be equilateral?

I. Kite   II.   Square

III.Rhombus

A. I and II only
B. I and III only
C. II and III only
D. I, II and III
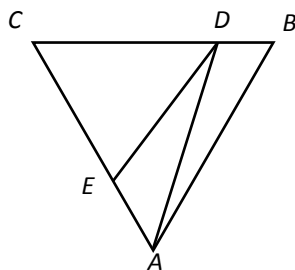
7.   [13-14 Standardized Test 2 Q4] (Book 2A Ch.6)

In the figure, find $a + b + c$.

A. 180°

B. 270°

C. 360°

D. 450°

8.   [13-14 Standardized Test 2 Q9]
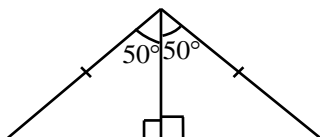
In ABC, $\angle ABC = \angle ACB = \angle BAC$, $\angle BAD = 14^o$ and $\angle CED = 66^o$. Find $\angle ADE$.

A. 20°

B. 24°

C. 46°

D. 80°

9.   [14-15 Standardized Test Q6]

Which of the following statements about the figure is correct?

I.   There is an isosceles triangle.

II.   There is an acute-angled triangle.

III.   There is an obtused-angle angle.

A.   I and II only

B.   I and III only

C.   II and III only

D.   I , II and III

10. [14-15 Standardized Test Q7]

Which of the following statements about three-dimensional figure is correct?

    A.   Cylinders are polyhedron.

    B.   Spheres have uniform cross-section.

    C.   Square pyramids are regular polyhedron.

    D.   All faces of cuboids are equiangular polygons.

11. [15-16 Final Exam, #17]

Which of the following statements are true?

I. It is possible to construct a concave regular hexagon.
II. We can form a polyhedron with 20 edges, 11 vertices and 11 faces.
III. Faces of a regular octahedron are equilateral triangles.

    A. I and II only

    B. I and III only

    C. II and III only

    D. I, II and III

~ End ~