CAMBRIDGE
INTERNATIONAL SCHOOL

Summer Assignment – Class 7th
Subject: Mathematics

Chapters: The Triangle and Its Properties & Comparing Quantities

Q1.A triangle has two angles measuring 45° and 65°.

Answer the following:

a) Find the third angle.

b) Identify whether the triangle is acute-angled, right-angled, or obtuse-angled.

c) Explain how you know.

Q2.A bridge is supported by a triangular frame with side lengths 8 cm, 10 cm, and 15 cm.

Answer the following:

a) Can these three lengths form a triangle? Give a reason using the triangle inequality.

b) If one side is increased to 20 cm, will a triangle still be possible? Explain.

Q3.A book costs ₹600. A shopkeeper offers a 15% discount.

Answer the following:

a) Calculate the discount amount.

b) Find the selling price.

c) Explain why customers prefer buying during discount sales.

Q4. Cricket Match Analysis

In a cricket tournament, Team A won 18 out of 24 matches.

Answer the following:

a)Find the winning percentage.

b)If Team B won 80% of its matches, which team performed better? Justify your answer.

Q5. Shopping Challenge

A shopkeeper marks an item at ₹2,000. He first gives a 10% discount and then charges 5% GST on the discounted price.

Answer the following:

a)Calculate the final amount paid.

b)Explain why GST is calculated after the discount.

Q6. Real-Life Problem

A triangular park has two sides measuring 12 m and 15 m. The third side is x m, where $10 < x < 27$.

Answer the following:

a)Explain why the third side cannot be 30 m.

b)Give any two possible values of x.

c)Justify your answers using the triangle property.

Instructions: Show all calculations and write your reasoning clearly. Marks will be awarded for both the correct answer and the explanation.