

Maths-7

Chapter 9: Triangle and Its Properties – Answer Key

A. MCQs

1. B
2. C
3. B
4. B
5. C

B. Fill in the Blanks

1. 3
2. Acute
3. Hypotenuse
4. Acute triangle
5. 70°

C. Short Answers

1. Acute, Right, Obtuse
2. No, because the sum would exceed 180° .
3. $180^\circ - (45^\circ + 55^\circ) = 80^\circ$
4. A triangle with all unequal sides.
5. Isosceles triangle

D. Word Problems

1. Total ratio = $2+3+4 = 9 \rightarrow$ Each angle = $180/9 \rightarrow$ Angles = $40^\circ, 60^\circ, 80^\circ$
2. Second angle = $5 \times 40^\circ = 200^\circ$ (Not possible, sum exceeds 180°) — likely error in question.
3. $6^2 + 8^2 = 36 + 64 = 100 = 10^2 \rightarrow$ Right triangle
4. $90^\circ - 35^\circ = 55^\circ$
5. $42 - (12 + 15) = 15$ cm