Chapter-4: Geometric Constructions
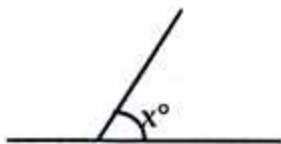
76. What is the value of half of the supplementary angle of 70°?
ⓐ 110°
ⓑ 55°
ⓒ 20°
ⓓ 10°   **ⓑ**

77.

If $\angle x = 40°$, what is the value of half of the supplementary angle of $\angle x$?
ⓐ 75°
ⓑ 70°
ⓒ 65°
ⓓ 60 °   **ⓑ**

78. If the vertical angle of a right angled triangle is 30°, then what will be the other angle in degree?
ⓐ 30
ⓑ 40
ⓒ 60
ⓓ 70   **ⓒ**

79. If one side of an equilateral triangle is extended. What will be the value of the derived angle in degree?
ⓐ 180
ⓑ 160
ⓒ 120
ⓓ 100   **ⓒ**

80. If the ratio of a triangle's sides is 6 : 8 : 10, then what will be the measurement of the greater angle in degree?
ⓐ 60
ⓑ 90
ⓒ 120
ⓓ 180   **ⓑ**

81. If a triangle's base, vertical angle and sum of the other two sides are provided, how many triangles can be drawn in many cases?
ⓐ Infinite
ⓑ 6
ⓒ 4
ⓓ 2   **ⓓ**

82. How many tangents can be drawn in a point on the circumference of a circle?
ⓐ 1
ⓑ 2
ⓒ 3
ⓓ 4   **ⓐ**

83. If only a side's length is given—
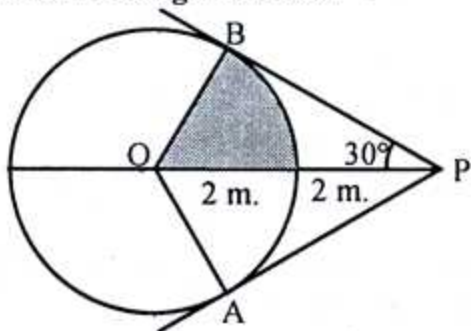i. An equilateral triangle can be drawn
ii. A square can be drawn
iii. A rectangle can be drawn
Which of the following is correct?
ⓐ i & ii
ⓑ i & iii
ⓒ ii & iii
ⓓ i, ii & iii   **ⓐ**

Answer question number 84 & 85 from the information given below—

84. What is the length of PB?
ⓐ $\sqrt{21}$ m.
ⓑ $\sqrt{29}$ m.
ⓒ 21 m.
ⓓ $2\sqrt{3}$ m.   **ⓓ**

85. What is the area of the darkened portion?
ⓐ $\dfrac{2\pi}{3}$ sqm.
ⓑ π sqm.
ⓒ $\dfrac{3\pi}{2}$ sqm.
ⓓ 4π sqm.   **ⓐ**