Chapter 10: Area and Mensuration (क्षेत्रमिति)

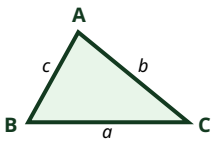
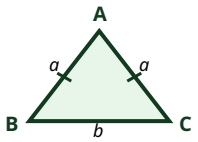
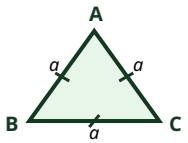
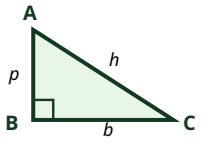
खरिदार द्वितीय पत्र - गणित अध्ययन सामग्री

PART - 1
- Triangles (त्रिभुजहरू)
- Square (वर्ग)
- Rectangle (आयात)
- Circle (वृत्त)

PART - 2
- Cone (शंकु)
- Cylinder (बेलना)
- Sphere / Hemisphere (गोला / अर्धगोला)
- Combined Solid (संयुक्त ठोस वस्तु)

PART - 3
- Path (बाटो)
- Cost Estimation (लागत अनुमान)

Formulas & Key Points (PART - 1: Triangles)

S.N.	Figure	Name (नाम)	Area (क्षेत्रफल - A)	Perimeter (परिमिति - P)
1.		**विषमबाहु त्रिभुज** (Scalene Triangle)	$A = \sqrt{s(s-a)(s-b)(s-c)}$ यहाँ, s = Semi-perimeter (अर्धपरिमिति) $s = (a + b + c) / 2$	$P = a + b + c$ (P = AB + BC + CA)
2.		**समद्विबाहु त्रिभुज** (Isosceles Triangle)	$A = (b / 4) \sqrt{(4a^2 - b^2)}$	$P = 2a + b$
3.		**समबाहु त्रिभुज** (Equilateral Triangle)	$A = (\sqrt{3} / 4)\, a^2$	$P = 3a$
4.		**समकोणी त्रिभुज** (Right-Angled Triangle)	$A = (1 / 2) \times p \times b$	$P = p + b + h$

Note (महत्वपूर्ण टिप्स):

① प्रश्नमा जुन त्रिभुज (Δ) दिएको छ, सोही त्रिभुज (Δ) को सुत्र (Formula) प्रयोग गर्ने।

② यदि प्रश्नमा त्रिभुज (Δ) को प्रकार (Type) स्पष्ट खुलाएको छैन भने, विषमबाहु त्रिभुज (Scalene Triangle) को सुत्र प्रयोग गर्ने।

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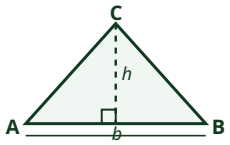
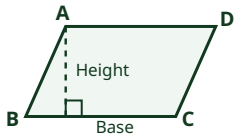
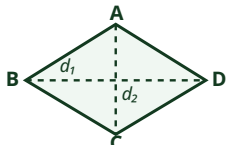
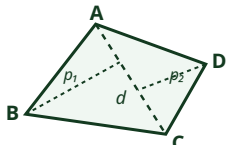
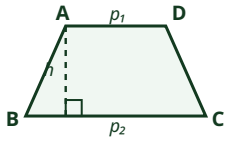
समतलीय सतहहरू (Plane Figures) - Formulae and Key Points

क्र.सं.	Name	Figure	Area	Perimeter
5.	**त्रिभुज** (Triangle)		$A = \frac{1}{2} \times b \times h$	$P = AB + BC + AC$
6.	**समानान्तर चतुर्भुज** (Parallelogram)		$A = b \times h$	$P = 2 (AD + AB)$
7.	**समबाहु चतुर्भुज** (Rhombus)		$A = \frac{1}{2} d_1 \times d_2$	$P = 4a$
8.	**चतुर्भुज** (Quadrilateral)		$A = \frac{1}{2} d (p_1 + p_2)$	$P = AB + BC + CD + DA$
9.	**समलम्ब चतुर्भुज** (Trapezium)		$A = \frac{1}{2} h (p_1 + p_2)$	$P = p_1 + p_2 + AB + CD$