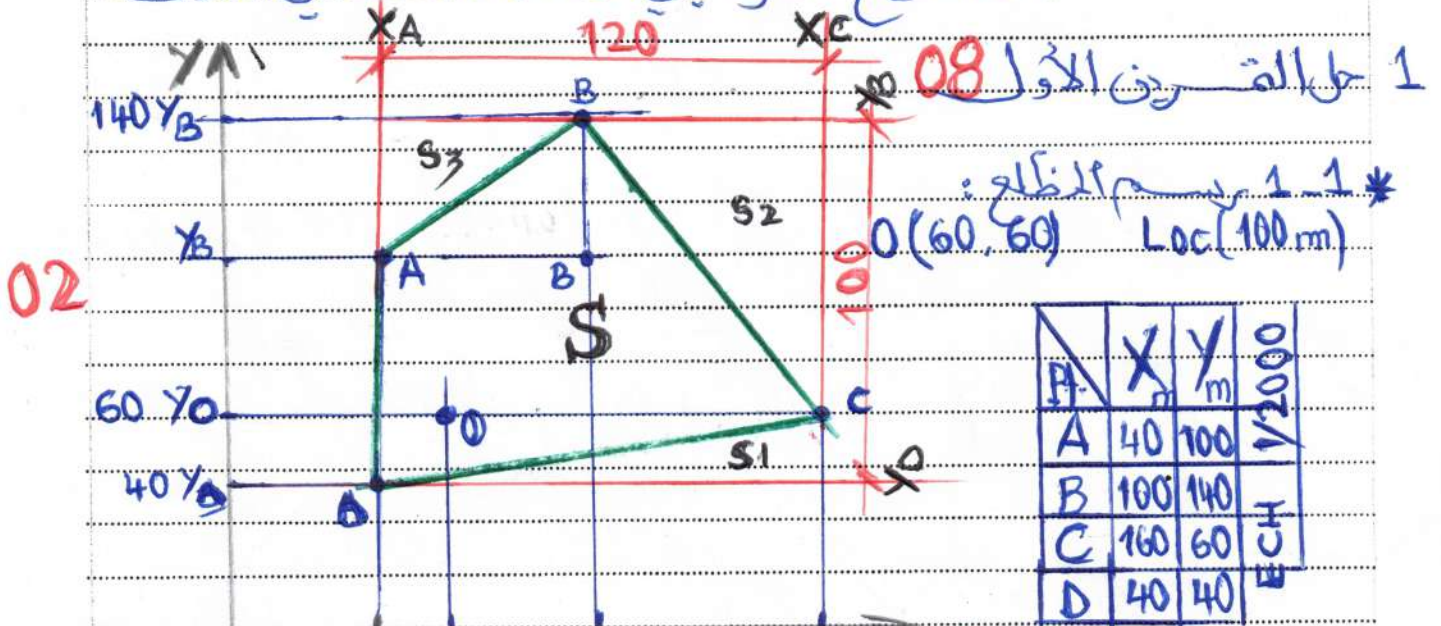


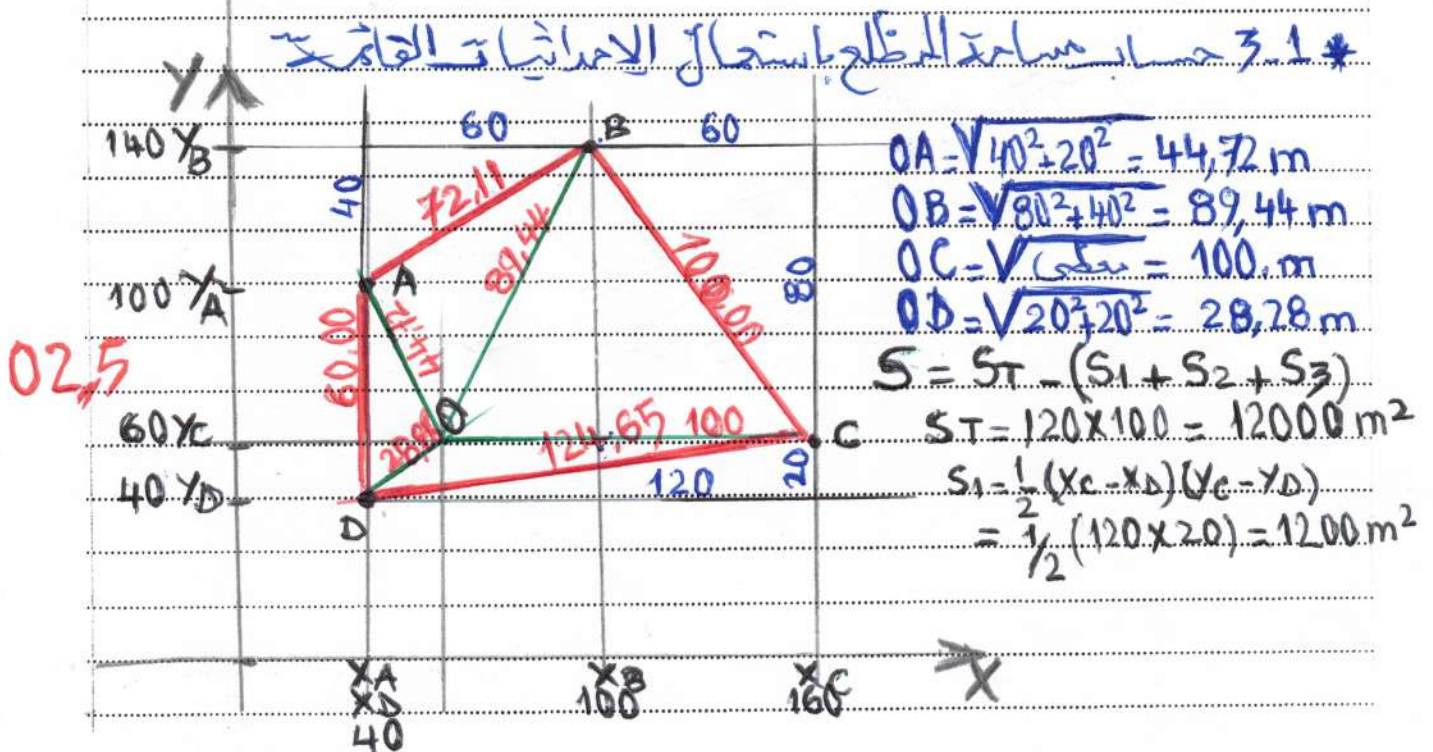
مقياس - الهندسة الوصفية
السنة الأولى - الموسم 2025/2024
التصحيح الفوري (أسئلة أساسية الأولى)

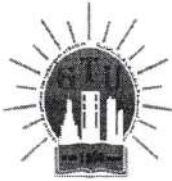


2. 1-2 إحداثيات (C) 01

0,5 $X_c = X_o + Loc = 60 + 100 = 160,00m$ على استقامة واحدة

0,5 $Y_c = Y_o = 60,00m$ التماس وتوازي الخطوط





مقياس الهندسة المعمارية
المستوى: السنة الأولى - المبرمج 2025/2024
التصحيح الفوري للأسئلة الدراسية الأولى

3 مل القسرين الثالث 04
4x0,25 3x0,25

ST	PTS	Angle H	Lsp	LINE	L m	Angle gr
0	1	260,41	1,697	1,445	25,20	19,82
	2	280,23	1,489	1,155	33,40	65,48
	3	345,71	1,324	1,102	22,20	34,26
	4	311,46	1,812	1,696	11,60	

المسافات الأفقية $L = (L_{sp} - LINE) \times 100$

$$L01 = (1,697 - 1,445) \times 100 = 25,20 \text{ m}$$

$$L02 = (1,489 - 1,155) \times 100 = 33,40 \text{ m}$$

$$L03 = (1,324 - 1,102) \times 100 = 22,20 \text{ m}$$

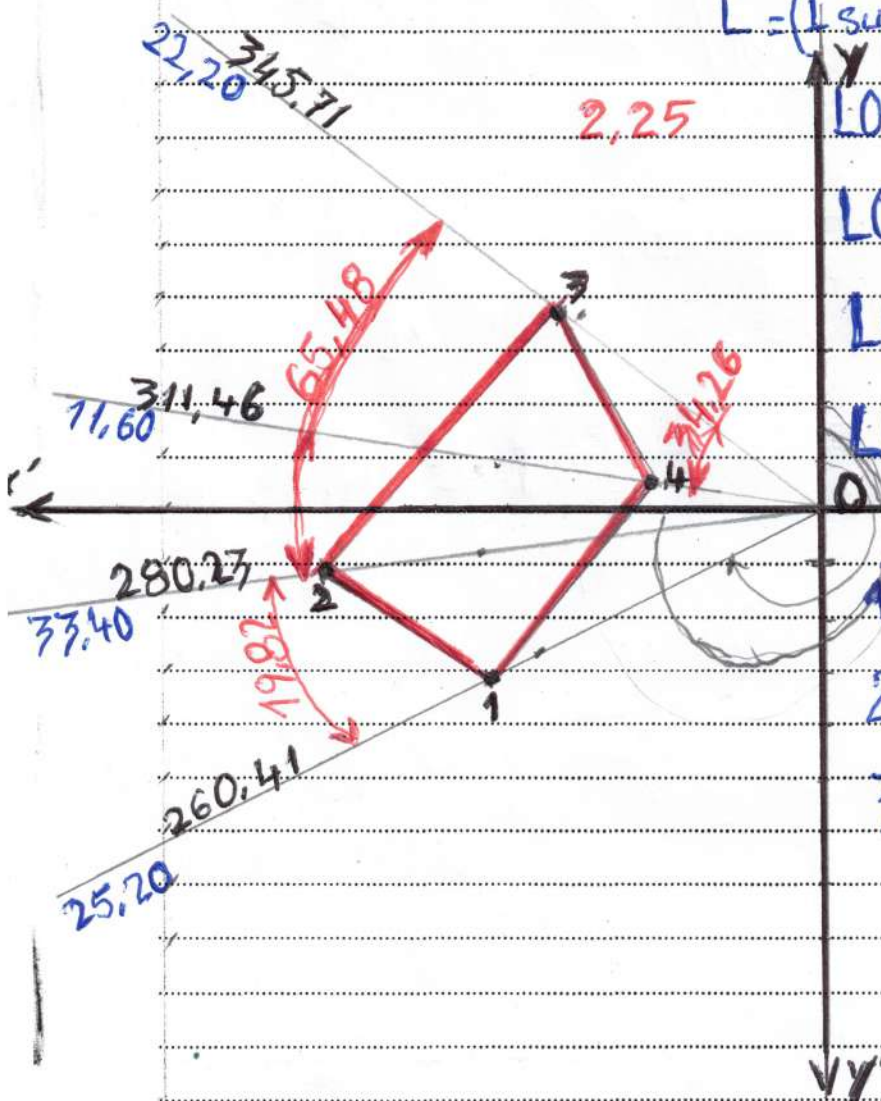
$$L04 = (1,812 - 1,696) \times 100 = 11,60 \text{ m}$$

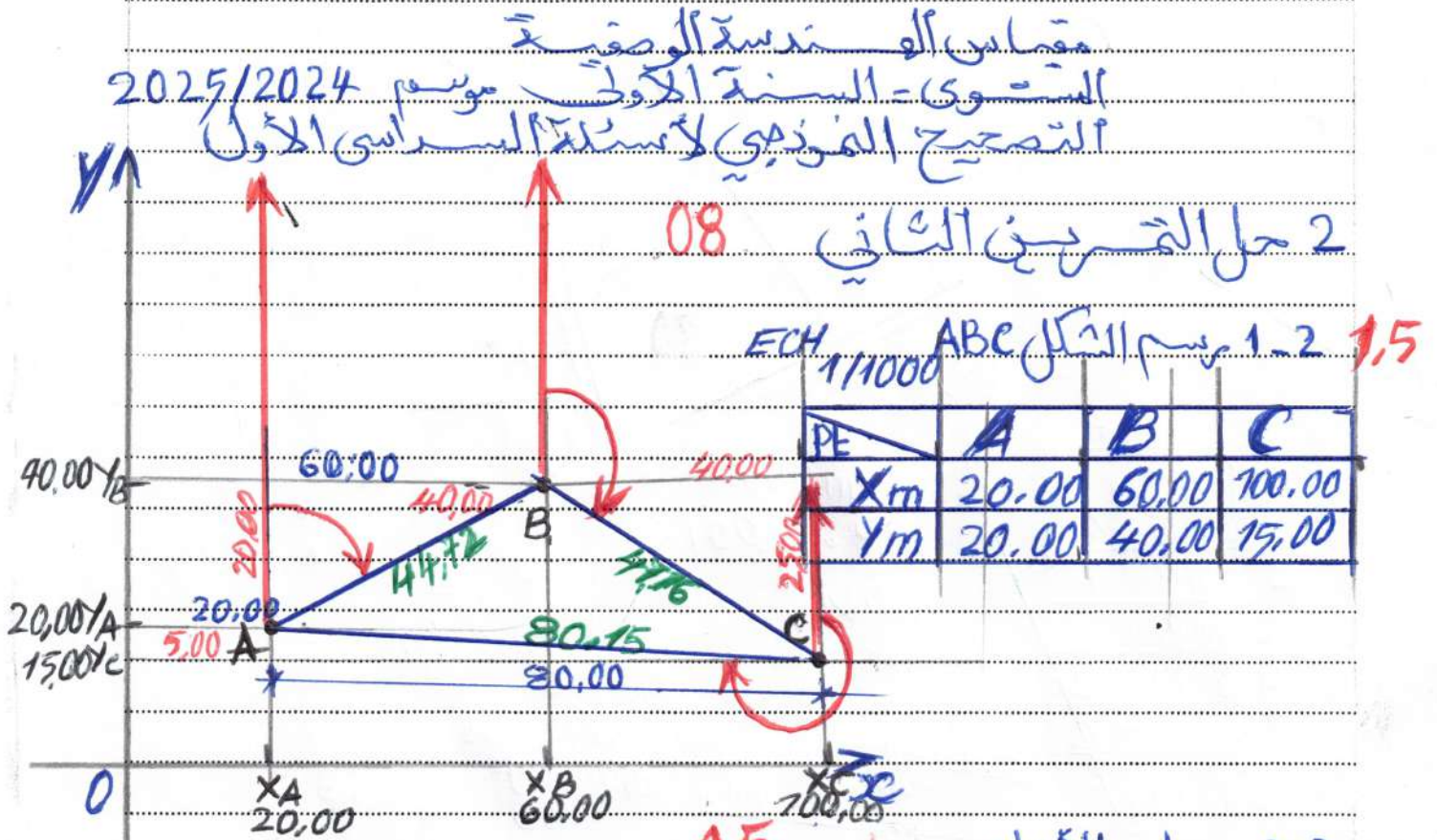
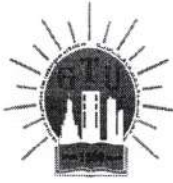
الزوايا بين النقاط

$$\hat{A}02 = 280,23 - 260,41 = 19,82 \text{ gr}$$

$$\hat{A}03 = 345,71 - 280,23 = 65,48 \text{ gr}$$

$$\hat{A}04 = 311,46 - 345,71 = 34,26 \text{ gr}$$





2.2 حساب الأبعاد

LAB 1.2-2

$$LAB = \sqrt{\Delta X_{BA}^2 + \Delta Y_{BA}^2} = \sqrt{(60-20)^2 + (40-20)^2} = 44.72 \text{ m}$$

LBC 2.2-2

$$LBC = \sqrt{\Delta X_{BC}^2 + \Delta Y_{BC}^2} = \sqrt{(100-60)^2 + (40-15)^2} = 47.16 \text{ m}$$

LAC 3.2-2

$$LAC = \sqrt{\Delta X_{AC}^2 + \Delta Y_{AC}^2} = \sqrt{(100-20)^2 + (20-15)^2} = 80.15 \text{ m}$$

3-2 حساب محيط المثلث ABC 3x0.5

PABE = LAB + LBC + LAC 0.5

$$PABE = 44.72 + 47.16 + 80.15 = 172.03 \text{ m}$$

4.2 حساب السموت الإحداثية 3x1.5

GAB - GBC - GCA

G_{AB} (السيت الاحماني) 2-4-2

$$\Delta X_{AB} = X_B - X_A = 60.00 - 20.00 = 40.00$$

$$\Delta Y_{AB} = Y_B - Y_A = 40.00 - 20.00 = 20.00$$

$\Delta X > 0$ $\Delta Y > 0 \Rightarrow$ الربع الأول

$$tg \alpha = \frac{|\Delta X_{AB}|}{\Delta Y_{AB}} = \frac{40.00}{20.00} = 2$$

$$G_{AB} = 63.43 \text{ gr}$$

$$G_{AB} = G'_{AB} = 63.43 \text{ gr}$$

G_{BC} (السيت الاحماني) 2-4-2

$$\Delta X_{BC} = X_C - X_B = 100.00 - 60.00 = 40.00$$

$$\Delta Y_{BC} = Y_C - Y_B = 15.00 - 40.00 = -25.00$$

$\Delta X > 0$ $\Delta Y < 0 \Rightarrow$ الربع الثاني

$$tg \alpha = \frac{|\Delta X_{BC}|}{|\Delta Y_{BC}|} = \frac{40.00}{-25.00} = 1.6$$

$$G'_{BC} = 57.99 \text{ gr}$$

$$G_{BC} = 200 - G'_{BC} = 200 - 57.99 = 142.01 \text{ gr}$$

G_{CA} (السيت الاحماني) 3-4-2

$$\Delta X_{CA} = X_A - X_C = 20.00 - 100.00 = -80.00$$

$$\Delta Y_{CA} = Y_A - Y_C = 20.00 - 15.00 = 5.00$$

$\Delta X < 0$ $\Delta Y > 0$ الربع الرابع

$$tg \alpha = \frac{|\Delta X_{CA}|}{|\Delta Y_{CA}|} = \frac{-80.00}{5.00} = 16$$

$$G'_{CA} = 86.42 \text{ gr}$$

$$G_{CA} = 400 - G'_{CA} = 400 - 86.42 = 313.58 \text{ gr}$$

3 x 1.5

	Δ		ΔX		ΔY		$tg \alpha$	الربع	السيت الاحماني		
	ΔX	ΔY	+	-	+	-			$G \text{ gr}$	$G \text{ gr}$	
G_{AB}	40.00	20.00	+		+		2	1	63.43	63.43	1.5
G_{BC}	40.00	25.00	+		-		1.6	2	57.99	142.01	1.5
G_{CA}	80.00	5.00			+		1.6	4	86.42	313.58	1.5

$$S = S_T - (S_1 + S_2 + S_3) \quad 710.7 = 4.7$$

$$S_T = (x_C - x_D) \times (y_B - y_D) = (160 - 40) \times (140 - 40) \quad 0.5$$

$$= 120 \times 100 = 12000 \text{ m}^2$$

$$S_1 = \frac{1}{2} (x_C + x_D) \times (y_C - y_D) = \frac{1}{2} (160 + 40) \times (60 - 40) \quad 0.5$$

$$= \frac{1}{2} (200 \times 20) = 2000 \text{ m}^2$$

$$S_2 = \frac{1}{2} (x_C - x_B) \times (y_B - y_C) = \frac{1}{2} (160 - 100) \times (140 - 60) \quad 0.5$$

$$= \frac{1}{2} (60 \times 80) = 2400 \text{ m}^2$$

$$S_3 = \frac{1}{2} (x_B - x_A) \times (y_B - y_A) = \frac{1}{2} (100 - 40) \times (140 - 100) \quad 0.5$$

$$= \frac{1}{2} (60 \times 40) = 1200 \text{ m}^2$$

$$S = 12000 - (2000 + 2400 + 1200) = 7200 \text{ m}^2 \quad 0.5$$

$$AB^2 = \Delta x_{BA}^2 + \Delta y_{BA}^2 = (100 - 40)^2 + (140 - 100)^2$$

$$AB = \sqrt{60^2 + 40^2} = 72.11 \text{ m}$$

$$BC^2 = \Delta x_{CB}^2 + \Delta y_{CB}^2 = (160 - 100)^2 + (140 - 60)^2$$

$$BC = \sqrt{60^2 + 80^2} = 100 \text{ m}$$

$$AD = y_A - y_D = 100 - 40 = 60 \text{ m}$$

$$CD^2 = \Delta x_{CD}^2 + \Delta y_{CD}^2 = (160 - 40)^2 + (60 - 40)^2$$

$$CD = \sqrt{120^2 + 20^2} = 124.65 \text{ m}$$