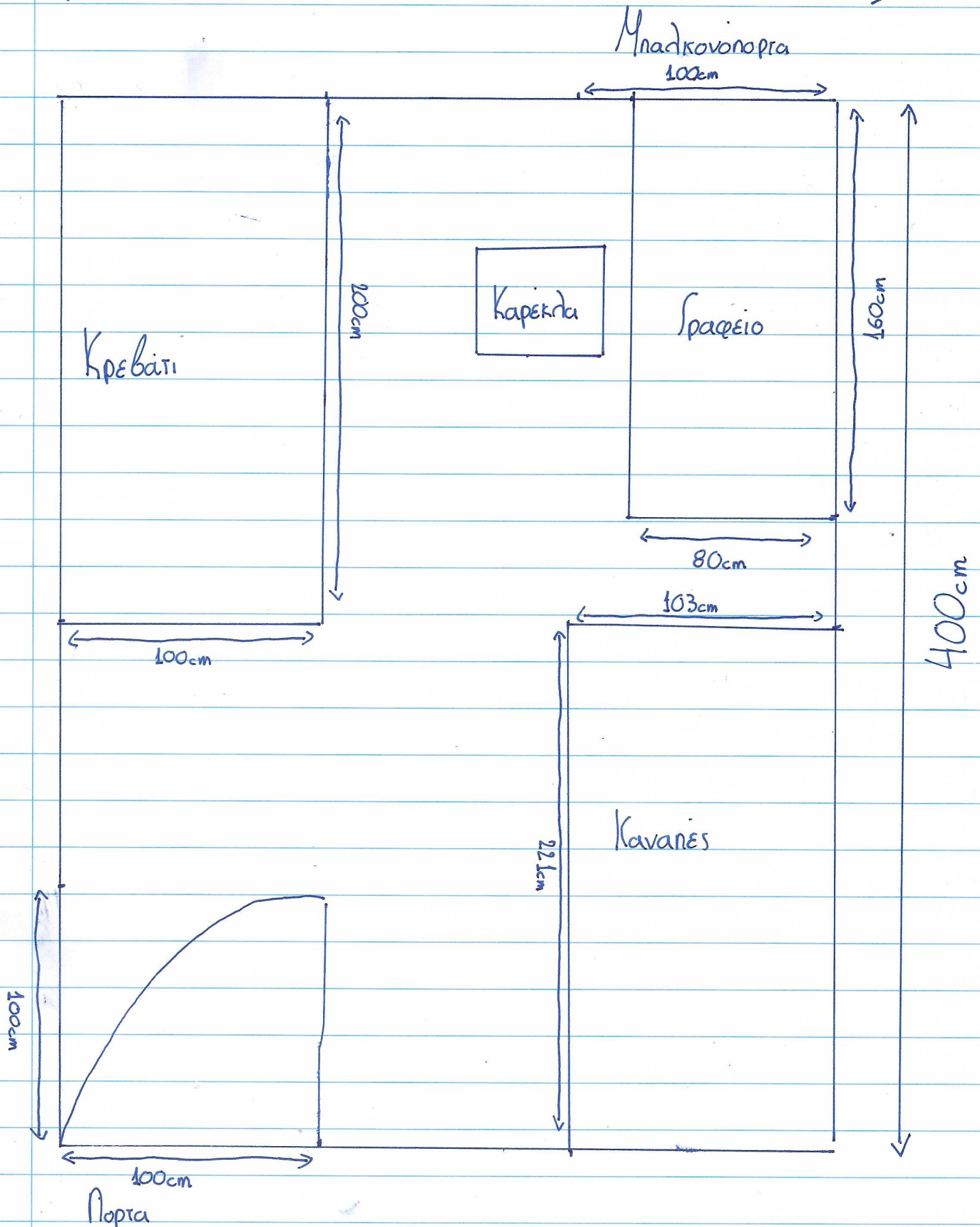


Πρόβλημα 2:

ΛΥΣΗ

300cm



Κλίμακα: 1:20

Πρόβλημα 3

1. Μεταβλητές: t_1, t_2, t_3, t_4, t_5
 t_i : Χρόνος έναρξης της διαδικασίας i

Πεδία:

$$D_{t_1}: \{9:00, 10:00, 11:00\}$$

$$D_{t_2}: \{9:00, 10:00, 11:00\}$$

$$D_{t_3}: \{9:00, 10:00, 11:00\}$$

$$D_{t_4}: \{9:00, 10:00, 11:00\}$$

$$D_{t_5}: \{9:00, 10:00, 11:00\}$$

Περιορισμοί:

$$C(t_1, t_3): t_1 > t_3: \{[10:00, 9:00], [11:00, 10:00], [11:00, 9:00]\}$$

$$C(t_3, t_4): t_4 > t_3: \{[9:00, 10:00], [9:00, 11:00], [10:00, 11:00]\}$$

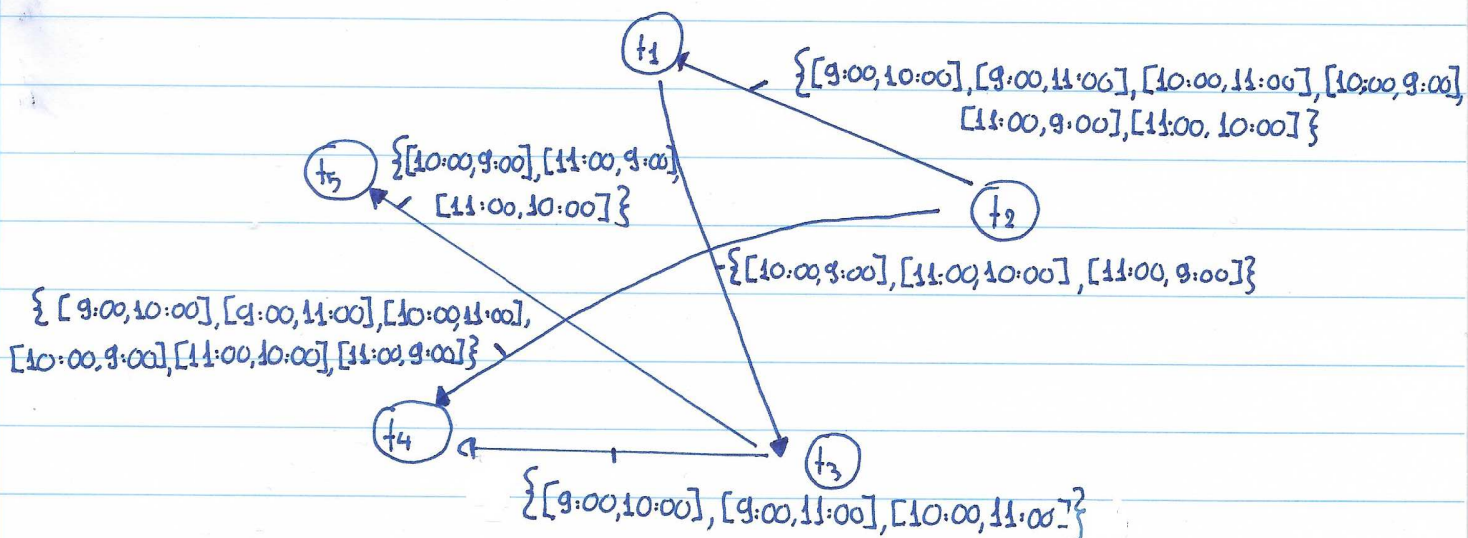
$$C(t_3, t_5): t_3 > t_5: \{[10:00, 9:00], [11:00, 9:00], [11:00, 10:00]\}$$

$$C(t_2, t_1): t_2 \neq t_1: \{[9:00, 10:00], [9:00, 11:00], [10:00, 11:00], [10:00, 9:00], [11:00, 9:00], [11:00, 10:00]\}$$

$$C(t_2, t_4): t_2 \neq t_4: \{[9:00, 10:00], [9:00, 11:00], [10:00, 11:00], [10:00, 9:00], [11:00, 10:00], [11:00, 9:00]\}$$

$$C(t_4): t_4 \neq 10:00: \{[9:00], [11:00]\}$$

2.



3. AC-3 Algorithm

Arcs:

1. $t_1 > t_3$ X
2. $t_3 < t_1$ X
3. $t_4 > t_3$ X
4. $t_3 < t_4$ ✓
5. $t_3 > t_5$ X
6. $t_5 < t_3$ X
7. $t_2 \neq t_1$ X
8. $t_1 \neq t_2$ ✓
9. $t_2 \neq t_4$ ✓
10. $t_4 \neq t_2$ ✓
11. $t_1 > t_3$ X
12. $t_4 > t_3$ ✓
13. $t_3 > t_5$ ✓
14. $t_3 < t_1$ ✓
15. $t_2 \neq t_1$ ✓

Domains:

- $D_{t_1}: \{9:00, \overset{11}{10:00}, \overset{11}{11:00}\}$
 $D_{t_2}: \{9:00, \overset{7}{10:00}, \overset{7}{11:00}\}$
 $D_{t_3}: \{9:00, 10:00, \overset{2}{11:00}\}$
 $D_{t_4}: \{9:00, \overset{3}{10:00}, 11:00\}$
 $D_{t_5}: \{9:00, \overset{6}{10:00}, \overset{6}{11:00}\}$

Λύση:

$$t_1 = 11:00$$

$$t_2 = 9:00$$

$$t_3 = 10:00$$

$$t_4 = 11:00$$

$$t_5 = 9:00$$

! Σημείωση: Με X μαρκάρονται οι αξίες που οδηγούν σε απόρριψη τιμών