QUESTÃO 1

a) 1 polegada — 2,54 cm
21,4" — X (cm)
X = 54,36 cm

1 m — 100 cm
X — 54,36 cm
100X = 54,36
X = 54,36 / 100
X = 0,54 m

1 cm — 10 mm
54,36 cm — X
X = 543,60 mm

b) 1 acre — 0,4047 ha
X — 1,8 ha
0,4047 · X = 1,8
X = 1,8 / 0,4047
X = 4,45 acres

1 ha — 10000 m²
1,8 ha — X
X = 18000,00 m²

c) 1 ha — 10000 m²
X — 90500 m²
X = 90500 / 10000
X = 9,05 ha

1 acre — 0,4047 ha
X — 9,05 ha
X = 9,05 / 0,4047
X = 22,36 acres

d) 1 pé — 30,48 cm
5000 — X (cm)
X = 152400,00 cm

1 m — 100 cm
X — 152400,00 cm
X = 152400,00 / 100
X = 1524,00 m

1 km — 1000 m
X — 1524,00 m
X = 1524,00 / 1000
X = 1,52 km

e) 1 acre — 0,4047 ha
2500 — X (ha)
X = 1011,75 ha

1 ha — 10000 m²
1011,75 — X
X = 10117500,00 m²

QUESTÃO 2

$K = 2500 \cdot \left(\frac{d}{\ell}\right)^2$

$K = 2500 \cdot \left(\frac{3}{125}\right)^2 = 1,44$

$d = 3,0$ cm

$\ell = 1,25$ m $\rightarrow 125,00$ cm

1m — 100 cm
0,71 — x
x = 71,00 cm

1 cm — 10 mm
x — 9
x = 9/10 = 0,90

$d = \frac{CAP(cm)}{\pi}$

$DAP_{S/C} = DAP_{C/C} - 2 \cdot EC$

$g = \frac{\pi \cdot DAP^2}{40000}$

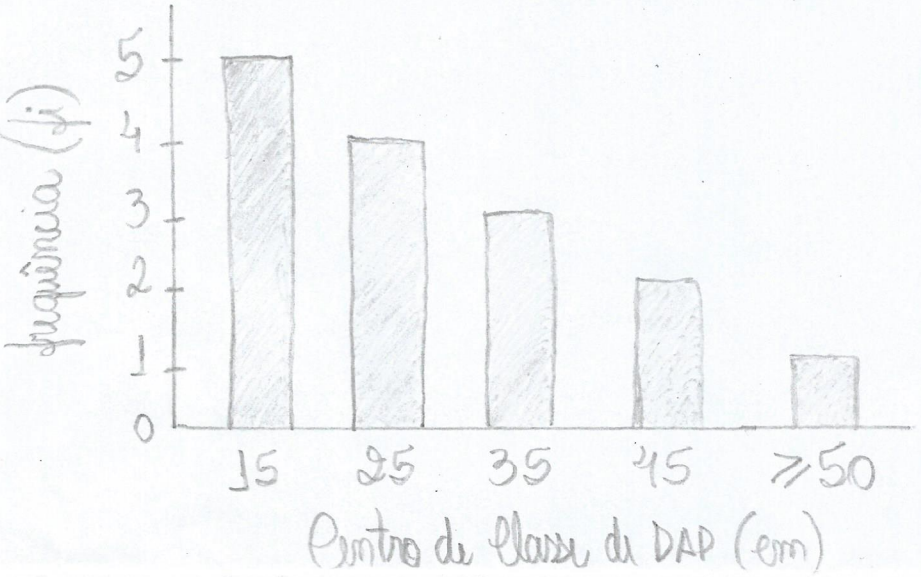
$N.ha^{-1} = \frac{K}{AS(g)}$

ÁRVORE	CAP(m)	CAP(cm)	EC(mm)	EC(cm)	DAP(cm)	$DAP_{S/C}$	$g(m^2)$	$N.ha^{-1}$
1	0,71	71,00	9	0,90	22,60	20,80	0,0401	35,91
2	1,25	125,00	12	1,20	39,79	37,39	0,1243	11,58
3	0,36	36,00	8	0,80	11,46	9,86	0,0103	139,81
4	1,08	108,00	10	1,00	34,38	32,38	0,0928	15,52
5	0,85	85,00	9	0,90	27,06	25,26	0,0575	25,04
6	0,45	45,00	5	0,50	14,32	13,32	0,0161	89,44
7	1,37	137,00	11	1,10	43,61	41,41	0,1494	9,64
8	0,33	33,00	9	0,90	10,50	8,70	0,0057	165,52
9	1,73	173,00	15	1,50	55,07	52,07	0,2382	6,05
10	0,38	38,00	7	0,70	12,10	10,70	0,0115	125,22
11	0,93	93,00	9	0,90	29,60	27,80	0,0688	20,93
12	1,19	119,00	12	1,20	37,88	35,48	0,1127	12,78
13	0,75	75,00	10	1,00	23,87	21,87	0,0448	32,14
14	1,53	153,00	16	1,60	48,70	45,50	0,1863	7,73
15	0,42	42,00	10	1,00	13,37	11,37	0,0140	102,86
				TOTAL	424,31	393,91	1,1755	800,17

$AB/ha = 1,44 \cdot 15 = 21,60\ m^2 \cdot ha^{-1}$

$\rightarrow K \cdot n$

AMPLITUDE DE CLASSE	CENTRO DE CLASSE (cm)	FREQUÊNCIA (f_i)
10 ⊢ 20	15	5
20 ⊢ 30	25	4
30 ⊢ 40	35	3
40 ⊢ 50	45	2
≥ 50	≥ 50	1



* $\bar{D} = \frac{\sum DAP}{n} = \frac{424,31}{15} = 28,29 \text{ cm}$

* $q = \sqrt{\frac{\sum DAP^2}{n}} = \sqrt{\frac{14966,66}{15}} = \sqrt{997,78} = 31,59 \text{ cm}$

* $d_{eq} = \sqrt{\sum DAP^2} = \sqrt{14966,66} = 122,34 \text{ cm}$

* $AB = \frac{\pi \cdot d_{eq}^2}{40000} = \frac{\pi \cdot 122,34^2}{40000} = 1,1755 \text{ m}^2$

* $\bar{g} = \frac{\pi \cdot q^2}{40000} = \frac{\pi \cdot 31,59^2}{40000} = 0,0784 \text{ m}^2$