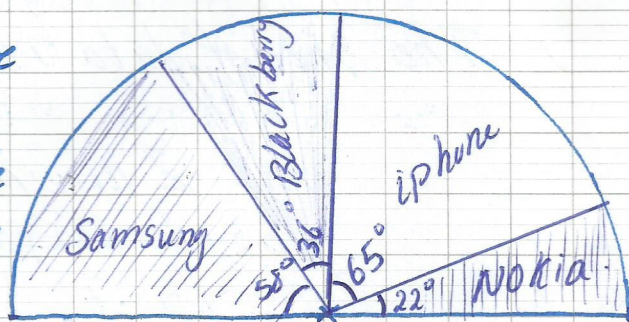


b) To represent given data on a semi circle. then all central angles should be divided by 2 to get a sum of 180° .

$$\alpha_1 = \frac{43}{2} \approx 22; \alpha_2 = \frac{130}{2} = 65; \alpha_3 = \frac{72}{2} = 36; \alpha_4 \approx 58$$

4. No, we can not determine the increasing cumulative frequencies of the given table, since the variable under study is qualitative



5. % of students having Blackberry = $\frac{5}{25} \times 100$ $\left(\frac{x_i}{N} \times 100 \right)$
 $= 20\%$

3rd - exercise:

1- Drawn. next page.

2a) H belongs to (d) (given)

then coordinates of H satisfy eqn of st. line (d): $y - 2x = -4$

$$\frac{-a}{10} - 2\left(\frac{a}{5}\right) = -4$$

$$\frac{-a}{10} - \frac{2a}{5} = -4$$

$$\frac{-5a}{10} = -4$$

$$\frac{-a}{2} = -4$$

$$a = 8$$

b) To find that H is the orthogonal projection of O on (d).

then we have to prove that (OH) is perpendicular to (d) and H belongs to (d).