

9. Inglês - 130

de Alemão - 170

As duas - 100

Inglês - 230

Alemão - 270

Total na escola - 400

$$\text{Total} = 100 + 130 + 170$$

$$T = 400$$

$$400 - 170 = 230 \text{ Inglês}$$

$$\text{Total} - \text{De Alemão} = 400 - 170 = 230$$

10.

$$A = 33 \text{ consenem} - 18 \text{ consenem só ele} = 15 \text{ consenem entre}$$

$$B = 71 \text{ consenem}$$

$$C = 33 \text{ consenem}$$

$$71 - 19 - 7 - 5 - 4 = 36 \text{ consenem só B}$$

$$A \cup B \cup C = 19$$

$$33 - 5 - 4 - 19 = 5 \text{ consenem só C}$$

$$A + B = 9$$

$$173 - 33 - 71 - 33 = 36 \text{ não consenem nada}$$

$$A + B + C = 5$$

$$B + C = 4$$

$$\text{Priguen B} = 55$$

$$\text{Total Entusiastas} = 193$$

$$11. A = \{1, 3, 5, 6, 7, 9, 10, 13\}$$

$$U = \{x \in \mathbb{N} \mid 1 \leq x \leq 16\}$$

$$B = \{2, 2, 5, 6, 7, 8, 10, 14\}$$

$$A' = \{2, 4, 8, 11, 12, 14, 15, 16\}$$

$$C = \{1, 2, 3, 5, 6, 7, 10, 11, 15\}$$

$$B' = \{1, 3, 4, 9, 11, 12, 13, 15, 16\}$$

$$D = \{3, 4, 5, 6, 7, 10, 12, 16\}$$

$$C' = \{4, 8, 9, 12, 13, 14, 16\}$$

$$D' = \{1, 2, 8, 9, 11, 13, 14, 15\}$$

$$a. A' \cap B' \cap C' \cap D' = \{\emptyset\}$$

$$b. A \cap B \cap C \cap D = \{5, 6, 7, 10\}$$

$$c. (A - (B \cup C)) \cap D = \{3, 4, 5, 6, 7, 9, 10, 12, 13, 16\}$$

$$(B \cup C) = \{1, 2, 3, 5, 6, 7, 8, 10, 11, 14, 15\}$$

$$A - B \cup C = \{9, 13\}$$