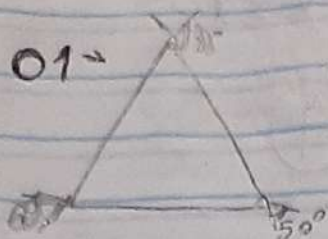


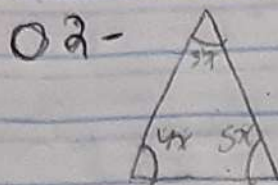
# Tarefa Bônus - Triângulos



$$Ex = 60^\circ + 50^\circ$$

$$Ex = 110^\circ$$

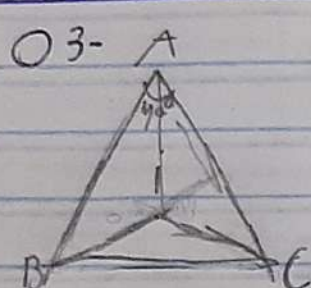
$$x = 110^\circ$$



$$3x + 4x + 5x = 180^\circ$$

$$12x = 180^\circ$$

$$x = 15^\circ$$



$$A = 40^\circ$$

$$B = 70^\circ$$

$$C = 70^\circ$$

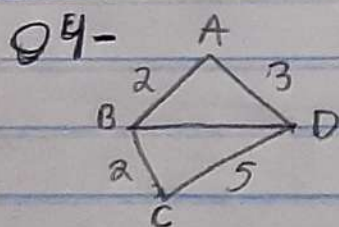
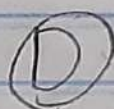
$$180^\circ$$



$$x + 35^\circ + 35^\circ = 180^\circ$$

$$x = 180 - 35 - 35$$

$$Bic = 110^\circ \quad x = 110^\circ$$



$$BD = ?$$

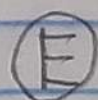
$$2^2 + 3^2 = BD^2$$

$$4 + 9 = BD^2$$

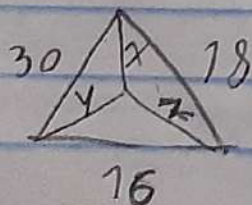
$$\sqrt{13} = BD$$

$$3,60 \approx BD \uparrow$$

$$BD = 4$$



05-



Condição de Existência:  $a < b + c$ , logo

$$30 < x + y$$

$$16 < y + z$$

$$18 < x + z$$

$$64 < 2x + 2y + 2z \div 2$$

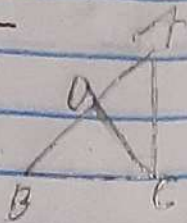
$$32 < x + y + z$$

logo, precisa ser maior que 32, portanto a letra E

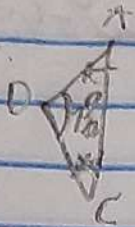




06 -



$AD \cong CD, CD \perp BC \text{ and } \angle ADC = 130^\circ$



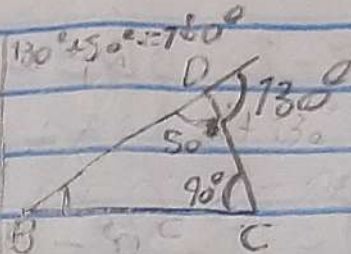
$$130^\circ + x + x = 180^\circ$$

$$2x = 180 - 130$$

$$2x = 50^\circ$$

$$x = 25^\circ$$

$$\boxed{A = C = 25^\circ}$$



$$B + 50^\circ + 90^\circ = 180^\circ$$

$$B = 180 - 90 - 50$$

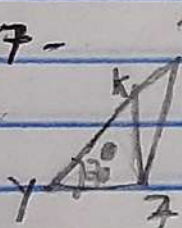
$$B = 40^\circ$$

$$C = 90^\circ + 25^\circ$$

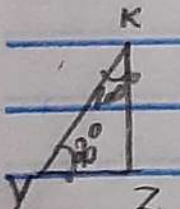
$$C = 115^\circ$$

$$\hat{A} = 25^\circ \mid \hat{B} = 40^\circ \mid \hat{C} = 115^\circ$$

07 -



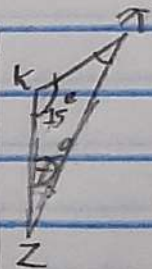
$\angle KZ = 105^\circ \text{ and } xz \cong xk \mid y = 20^\circ$



$$\hat{Z} + 105^\circ + 20^\circ = 180^\circ$$

$$\hat{Z} = 180 - 105 - 20$$

$$\hat{Z} = 55^\circ$$



$$x + y + z = 180^\circ$$

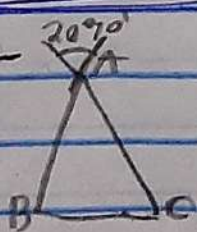
$$x + 20^\circ + 130^\circ = 180^\circ$$

$$x = 180 - 150$$

$$x = 30^\circ$$

$$Z = 55^\circ + 75^\circ = 130^\circ \mid x = 30^\circ$$

08 -



$$\angle A = \hat{B} + \hat{C} \mid B = C$$

$$\angle A = 2\hat{B}$$

$$20^\circ + 10^\circ = 2\hat{B}$$

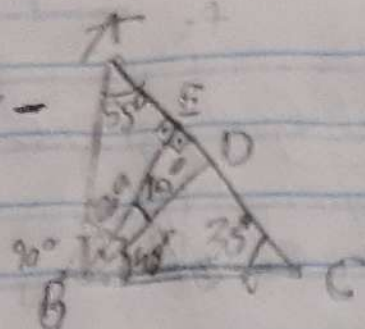
$$30^\circ 05' = \hat{B}$$

(B)

$$\boxed{\hat{B} = 10^\circ 05' = \hat{C}}$$



09-



$$B = 90^\circ - 10^\circ = 80^\circ$$

$$B = 80^\circ : 2$$

$$B = 40^\circ$$

$$\begin{array}{l|l|l} \angle EDB = 180^\circ - 90^\circ - 10^\circ & \angle BDC = 100^\circ & \angle BCD = 180^\circ - 100^\circ - 45^\circ \\ \angle EBB = 80^\circ & & \angle BCD = 35^\circ \end{array}$$

$$\begin{array}{l|l} \hat{C} = 35^\circ & \hat{A} + 35^\circ + 90^\circ = 180^\circ \\ \hat{B} = 90^\circ & \hat{A} = 180^\circ - 90^\circ - 35^\circ \\ & \hat{A} = 55^\circ \end{array}$$

$$\boxed{\hat{C} = 35^\circ}$$

$$\boxed{\hat{A} = 55^\circ}$$