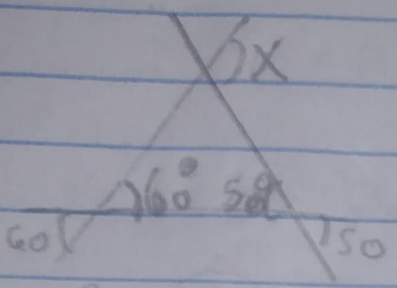
Exercícios

01-



Oposto ao vértice

$Ex\hat{A} = \hat{B} + \hat{C}$

$Ex\hat{A} = 60 + 50 = 110°$

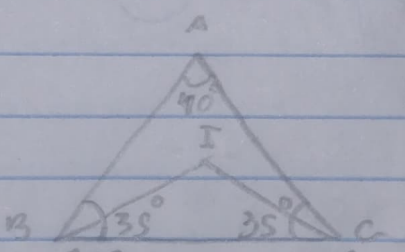
(C)

02- $3x + 4x + 5x = 180$

$x = \frac{180}{12} = 15°$

(E)

03- $\overline{AB} = \overline{AC}$



$2x + 40 = 180$

$2x = 140$

$x = 70$

$\hat{B}$ e $\hat{C}$ com bissetriz:

$\hat{B} = \frac{70}{2} = 35$

$\hat{C} = \frac{70}{2} = 35$

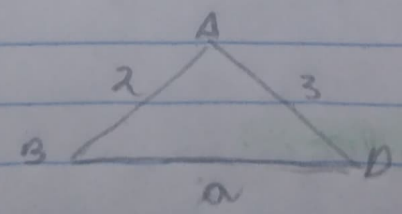
$35 + 35 + \hat{I} = 180$

$\hat{I} = 180 - 70$

$\hat{I} = 110°$

(D)

04- $\overline{AB} = \overline{BC}$



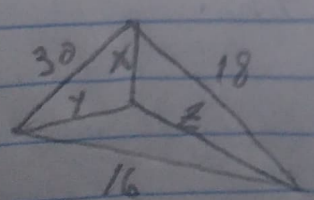
$a < 2 + 3$

$a < 5$

única alternativa

(E)

05-



$30 < x + y$

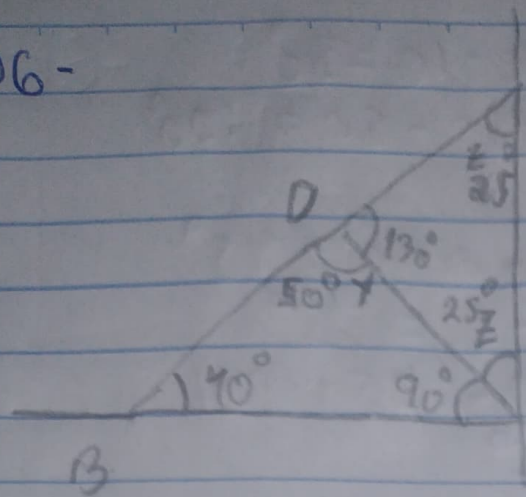
$18 < x + z$

$16 < y + z$

$+ \quad 64 < 2x + 2y + 2z \quad :2$

$32 < x + y + z$

06-



$A\hat{D}C = 130^\circ$

$AD \cong CD$ ⇒ isósceles

$CD \perp BC$ ⇒ 90°

$\hat{Y} = 180 - 130 = 50^\circ$

$\hat{B} = 180 - (90 + 50)$

$\hat{B} = 180 - 140 = 40^\circ$

$AD \cong CD$ ⇒ ângulos da mesma medida

$130 + 2Z = 180$

$Z = \frac{50}{2} = 25^\circ$

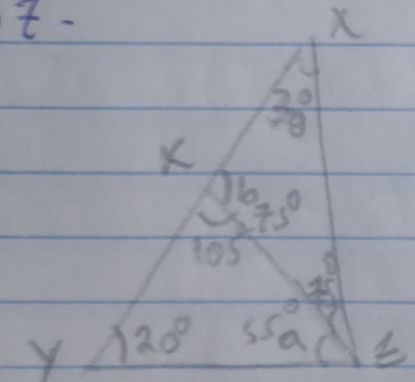
$\hat{C} = 90 + 25 = 115^\circ$

$\hat{A} = 25^\circ$

$\hat{B} = 40^\circ$

$\hat{C} = 115^\circ$

07-



$\hat{Y} = 20^\circ$

$Y\hat{K}E = 105^\circ$

$XE \cong XK$ ⇒ isósceles

$a = 180 - (105 + 20) = 55^\circ$

$b = 180 - 105 = 75^\circ$

$XE \cong XK$ ⇒ ângulos da mesma medida

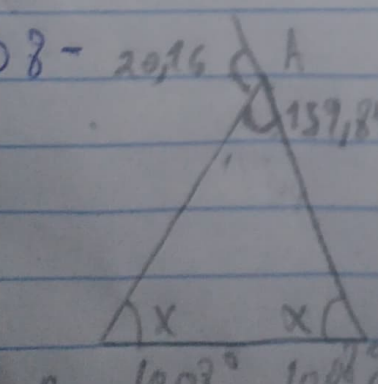
$\hat{Z} = 75 + 55 = 130^\circ$

$\hat{X} = 180 - (75 + 75) = 30^\circ$

$\hat{X} = 30^\circ$

$\hat{Z} = 130^\circ$

08- 20,16



$\hat{B} = \hat{C}$

Admitindo: $E\hat{x}\hat{A} = 20^\circ 10' \cong 20,16^\circ$

$\hat{A} = 180 - 20,16 = 159,84^\circ$

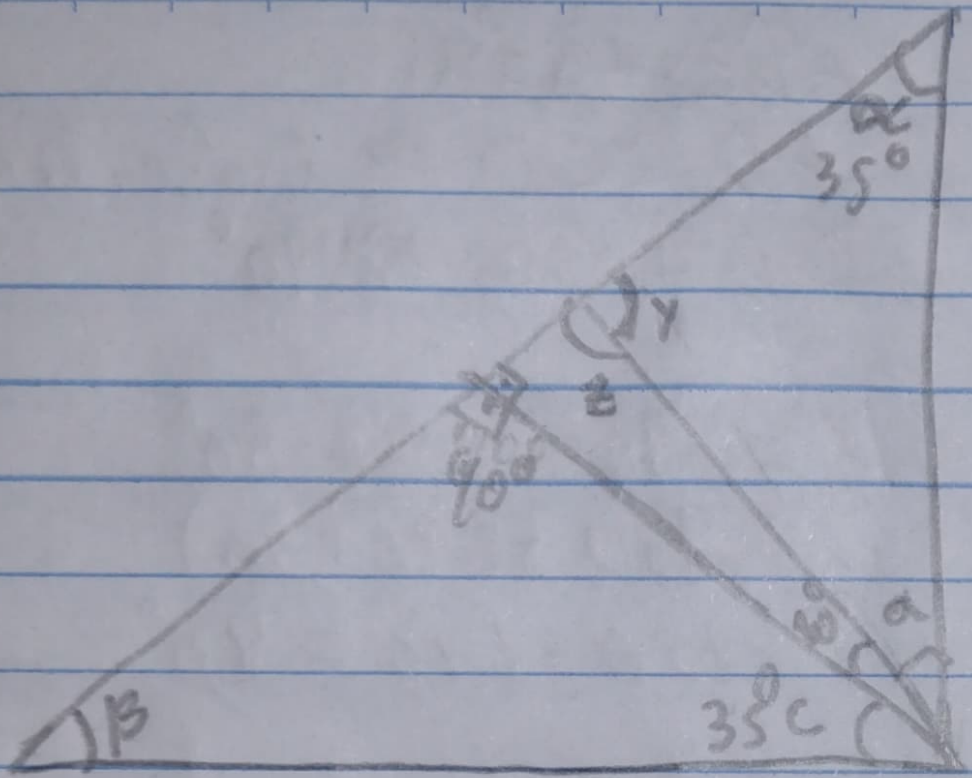
$2x + 159,84 = 180$

$2x = 20,16$

$x = 10,08^\circ \Rightarrow 10^\circ 05'$

(B)

09-



$z = 90 - 40 = 80^\circ$

$\gamma = 180 - 80 = 100^\circ$

Bissetriz de $90^\circ = 45^\circ$

$a = 45 - 10 = 35^\circ$

$\alpha = 180 - (45 + 100)$

$\alpha = 35^\circ$

$c = 45 - 10 = 35^\circ$

$\beta = 180 - (35 + 90)$

$\beta = 55^\circ$