

**INSTITUTO FEDERAL**

São Paulo

Câmpus Cubatão

DOCENTE: LUCIANO ANDRE CARVALHO REIS

DISCENTE: GABRIEL ALVES DE OLIVEIRA

SALA: 317

## **MATEMATICA**

SEMANA 19

① Apenas inverter os ângulos.

$$x = 180 - 60 - 50 = 70$$

$$x = 180 - 70$$

$$x = 110^\circ$$

Resposta: (C)

②  $3x + 4x + 5x = 180$

$$12x = 180$$

$$x = \frac{180}{12} = 15^\circ$$

Resposta: (E)

③  $180 - 40 = 140$  }  $\frac{140}{2} = 70 \rightarrow B = C$

$$I = 180 - 70 = 110^\circ$$

Resposta: (D)

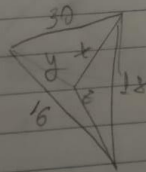
④ ABD  $\rightarrow (2, -2) < x < 2 + 3 \rightarrow 1 < x < 5$

BCD  $\rightarrow (2, -5) < x < 2 + 5 \rightarrow 3 < x < 7$

$$3 < x < 5, x = 4$$

Resposta: (E)

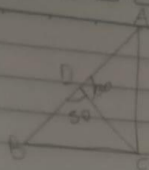
⑤



$$\begin{cases} 20 < x+y \\ 18 < x+z \\ 16 < y+z \end{cases} \quad \begin{cases} 64 < 2x+2y+z \\ 32 < x+y+z \end{cases}$$

Resposta: (E)

⑥



$$AD = CD, CD \perp BC, \angle ADC = 130^\circ$$

$$180 - 130 = 50 \quad \left\{ \begin{array}{l} 50 \\ 25 \end{array} \right. \rightarrow 25 + 30 = 55$$

$$115 + 25 = 140 \rightarrow 180 - 140 = 40$$

Resposta:  $25^\circ, 40^\circ, 115^\circ$

⑦

$$y \hat{E} K = 180 - 125 = 55 \quad \left\{ \begin{array}{l} x \hat{K} = 180 - 105 = 75^\circ \end{array} \right.$$

$$x \hat{Z} = 75 \rightarrow 15 + 75 = 150$$

$$z = x \hat{Z} + y \hat{Z} K = 55 + 75 = 130^\circ$$

$$x = 180 - 150 = 30^\circ$$

Resposta:  $z = 130^\circ$  e  $x = 30^\circ$

⑧

$$x + 2y = 180$$

$$20^\circ + 10^\circ = 30^\circ \quad \left\{ \begin{array}{l} y = 10^\circ \cdot 5 \end{array} \right.$$

$$x = 180 - 20 \rightarrow x = 180 - 20 \cdot 10^\circ$$

$$180^\circ - 179^\circ 50' \rightarrow x = 179^\circ 50'$$

Resposta: (B)

⑨

$$\angle EDB = 180^\circ - 10^\circ - 90^\circ = 80^\circ$$

$$\angle CDB = 180^\circ - 80^\circ = 100^\circ$$

$$\angle DAC = 45^\circ$$

$$\angle DCB = 180^\circ - 100^\circ - 45^\circ = 35^\circ$$

$$\angle CAB = 180^\circ - 90^\circ - 35^\circ = 55^\circ$$

Resposta:  $35^\circ$  e  $55^\circ$