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Tarefa Básica - triângulos

1.
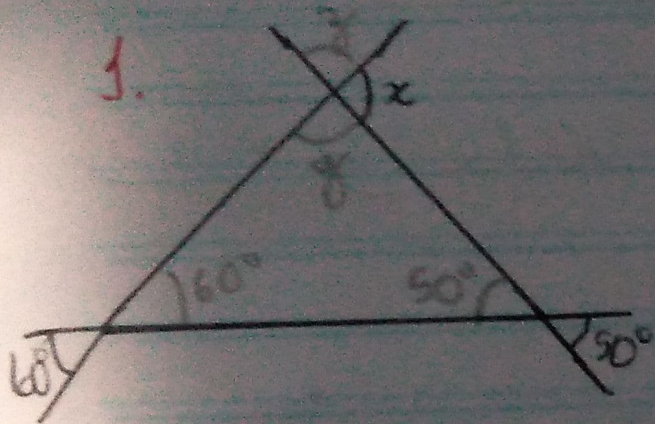
$y = 180 - (60 + 50) \rightarrow 180 - 110 \rightarrow y = 70°$

$y = z$

$z = 360 - (y + z)/2 \rightarrow 360 - (70 + 70)/2$

$x = 360 - 140 / 2 \rightarrow 220/2$

$\boxed{x = 110°}$

R: c)

2.

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

$12x = 180$

$x = \dfrac{180}{12} = 15$

R: e)

3.

$B + C = 180° - 40° = 140°$

$(\dfrac{B+C}{2}) = \dfrac{140°}{2} = 70°$

$I + 70° = 180°$

$I = 180 - 70$ R. d)

$I = 110°$

4.

$A\hat{B}D: \quad 2 + 3 > x > 3 - 2 \qquad\qquad 5 > x > 1 \qquad 3 < x < 5$ R. e)

$B\hat{C}D: \quad 2 + 5 > x > 5 - 2 \qquad\qquad 7 > x > 3 \qquad \boxed{x = 4}$

5.

$30 < x + y$

$64 < 2x + 2y + 2z = 30 < x + y + z = 33$

$18 < z + y$

$16 < y + z$

     R. e)

6.
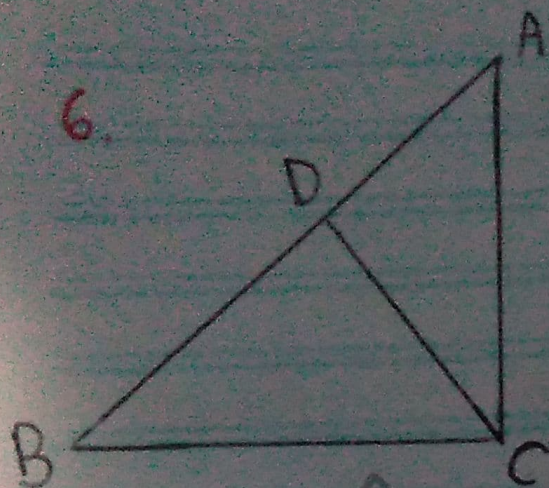
$B\hat{C}D = 90°$ $A\hat{D}C = 130°$

$B\hat{D}C = 180 - 130 = 50°$

$B = (90 + 50) - 180 \to 140 - 180$

$\boxed{B = 40°}$

$C\hat{A}D = A\hat{D}C$ $A = (180 - 130)/2 \to 50/2$ $\boxed{A = 25}$

$C = 90 + 25$ $\boxed{C = 115°}$

7.
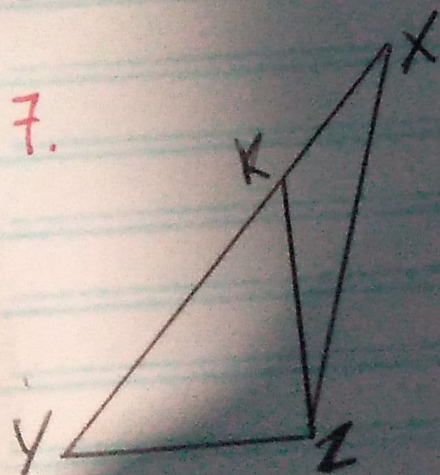
$Y = 20°$ $Y\hat{K}K = 105°$

$Y\hat{Z}K = 180 - (105 + 20) \to 180 - 125$

$Y\hat{Z}K = 55°$

$X\hat{K}Z = 180 - 105 \to 75°$

$\hat{X} = 180 - 150 \to \boxed{\hat{X} = 30}$

$\hat{Z} = 55° + 75° \to \boxed{\hat{Z} = 130°}$

$\hat{Z} = 55° + 75° \rightarrow \boxed{\hat{Z} = 130°}$ $\hat{X} = 180 - 150 \rightarrow \boxed{\hat{X} = 30°}$

8.

$a + 2b = 180°$

R: b)

$20° \ 10' = 2b$ $a = 180 - 20° \ 10'$

$b = 10° 5'$

$a = 180 - 2b$ $180° = 179° \ 60'$ $a = 179° \ 50'$

9.

$EDB: 180° - 10° - 90° = 80°$ $DBC: 45°$

$CDB: 180° - 80° = 100°$

$DCB: 180° - 100° - 45° = 35°$

$GAB: 180° - 90 - 35 = 55°$