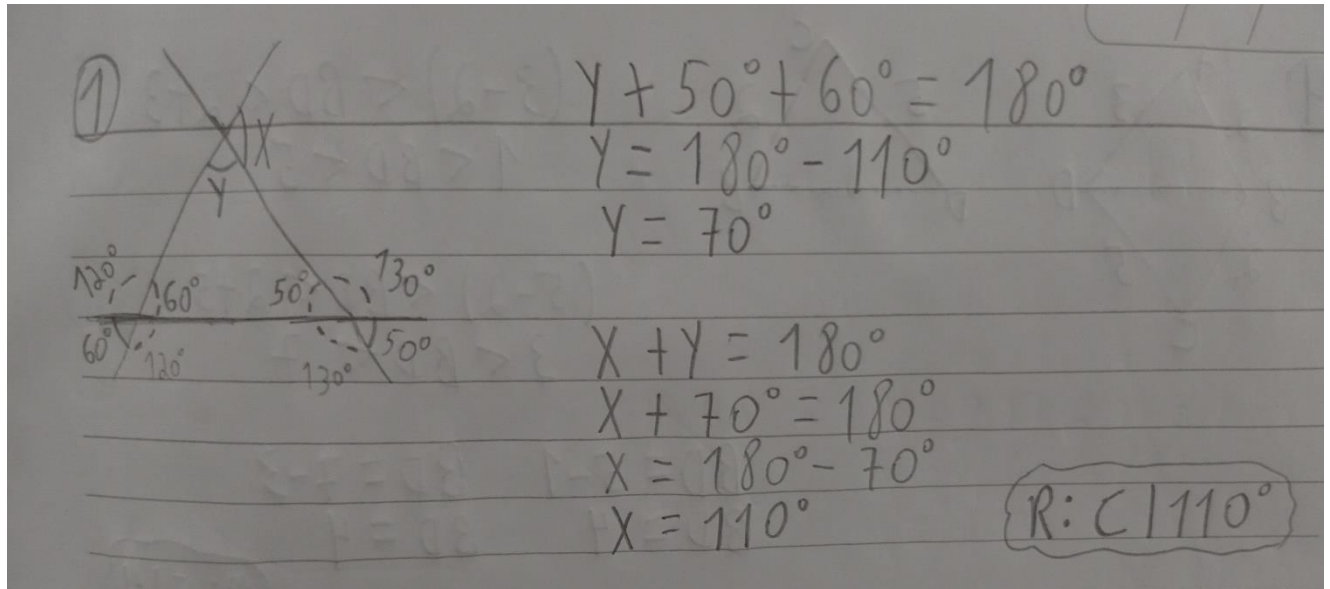


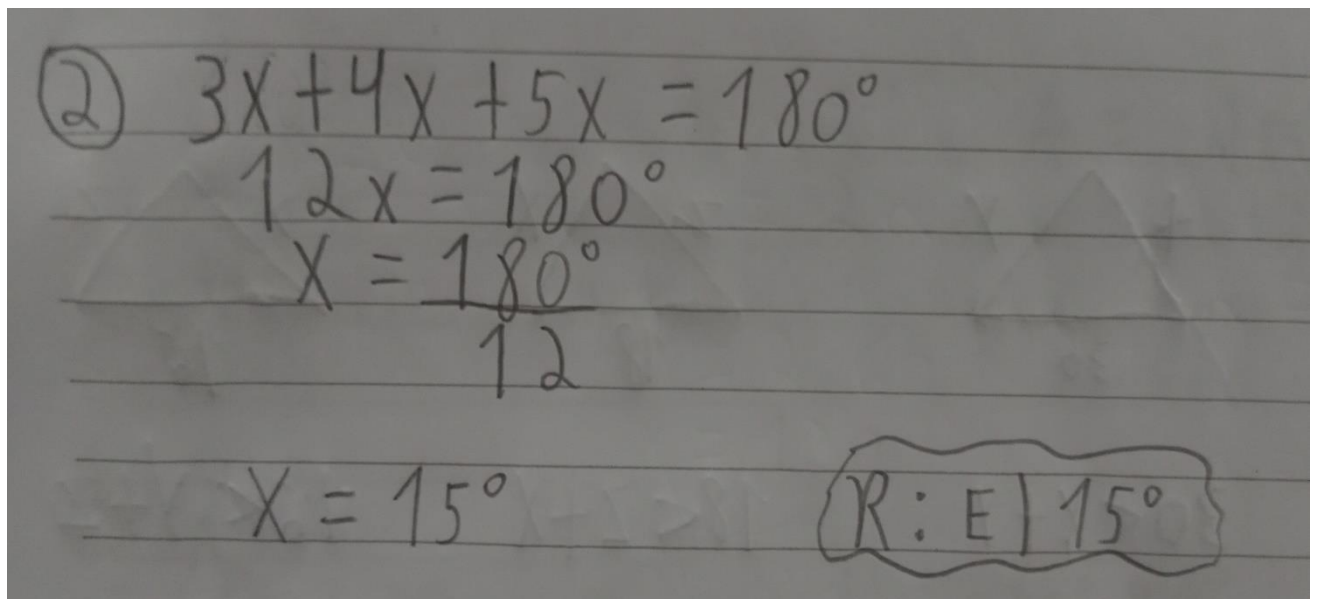
**Triângulos:**

1.



R: c) 110°

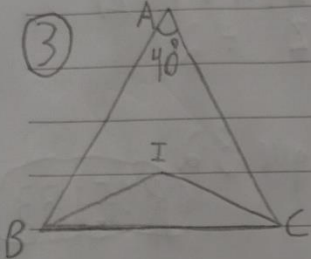
2.

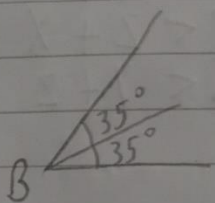


R: e) 15°

3.

③



$$\begin{aligned}
 A + B + C &= 180^\circ \\
 40^\circ + B + C &= 180^\circ \\
 B + C &= 180^\circ - 40^\circ \\
 B + C &= 140^\circ \\
 B &= 70^\circ \\
 C &= 70^\circ
 \end{aligned}$$


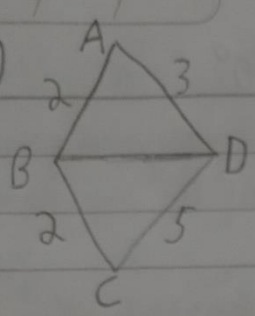
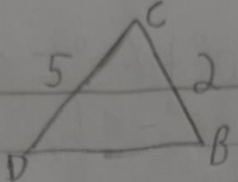
$$\begin{aligned}
 B + I + C &= 180^\circ \\
 35^\circ + I + 35^\circ &= 180^\circ \\
 I &= 180^\circ - 70^\circ \\
 I &= 110^\circ
 \end{aligned}$$

R: D)  $110^\circ$

R: d)  $110^\circ$

4.

④

$$\begin{aligned}
 (3-2) &< BD < 2+3 \\
 1 &< BD < 5
 \end{aligned}$$

$$\begin{aligned}
 (5-2) &< BD < 2+5 \\
 3 &< BD < 7
 \end{aligned}$$

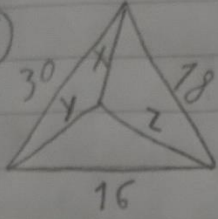
$$\begin{aligned}
 BD &= 5-1 & BD &= 7-3 \\
 BD &= 4 & BD &= 4
 \end{aligned}$$

R: E) 4

R: e) 4

5.

⑤



30

18

16

$30 < x + y$

$18 < z + x$

$16 < y + z$

$$\begin{cases} 30 < x + y \\ 18 < z + x \\ 16 < y + z \end{cases}$$

$$(30 + 18 + 16) < (x + y + z + x + y + z)$$

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

$$32 < x + y + z$$

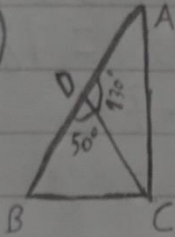
$$x + y + z \text{ é maior que } 32$$

R: E | 33

R: e) 33

6.

⑥



130°

50°

115°

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

$2x = 50^\circ$

$x = 25^\circ$

$A = x = 25^\circ$

$CD \perp CB$

$C = C' + C''$

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

$C = 115^\circ$

$B + C'' = 130^\circ$

$B = 130^\circ - 90^\circ$

$B = 40^\circ$

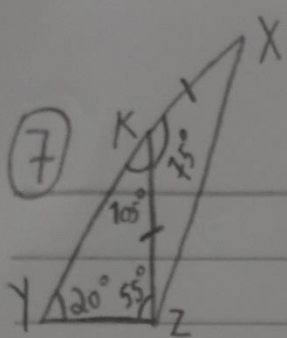
tilibra

R: A = 25°; B = 40°; C = 115°

R: A = 25°; B = 40°; C = 115°.

7.

⑦



$K' = 105^\circ$   $K'' = 75^\circ$   $Z = Z' + Z''$   
 $Z' = 55^\circ$   $Z'' = 75^\circ$   $Z = 55^\circ + 75^\circ$   
 $Y = 20^\circ$   $X = ?$   $Z = 130^\circ$

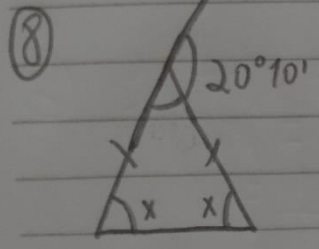
$X + Y + Z = 180^\circ$   
 $X + 20^\circ + 130^\circ = 180^\circ$   
 $X = 180^\circ - 150^\circ$   
 $X = 30^\circ$

R:  $X = 30^\circ$ ;  $Z = 130^\circ$

R:  $X = 30^\circ$ ;  $Z = 130^\circ$ .

8.

⑧



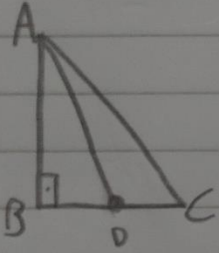
$A = \frac{a}{2}$   $A = \frac{20^\circ 10'}{2}$   $A = 10^\circ 05'$

R: b)  $10^\circ 05'$

R: b) Somente  $10^\circ 05'$

9.

⑨


$$\begin{aligned} \angle B\hat{A}C &= 180^\circ - 10^\circ - 90^\circ = 80^\circ \\ \angle B\hat{A}D &= 180^\circ - 80^\circ = 100^\circ \\ \angle ACD &= 180^\circ - 100^\circ - 45^\circ = 35^\circ \\ \angle A &= 180^\circ - 90^\circ - 35^\circ = 55^\circ \end{aligned}$$

$\angle ABD = 45^\circ$

$R: 35^\circ \text{ e } 55^\circ$

R:  $35^\circ$  e  $55^\circ$ .