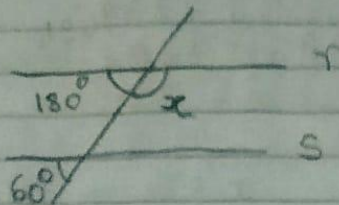


LISTA GEOMETRIA PLANA

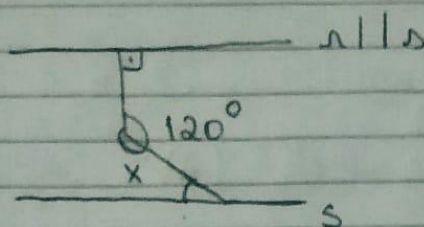
Exercícios Básicos

01.



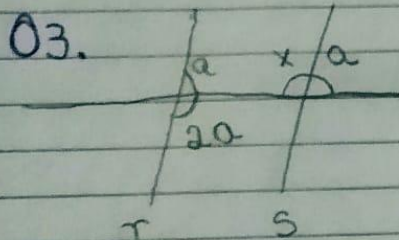
$$\begin{aligned}x + 60^\circ &= 180^\circ \\x &= 180^\circ - 60^\circ \\x &= 120^\circ \quad (a)\end{aligned}$$

02.



$$\begin{aligned}x + 120^\circ &= 180^\circ \\x &= 180^\circ - 120^\circ \\x &= 60^\circ \\60^\circ + 90^\circ &= 150^\circ \\180^\circ - 150^\circ &= 30^\circ \quad (B)\end{aligned}$$

03.



$$\begin{aligned}3a &= 180^\circ \\a &= \frac{180^\circ}{3} = 60^\circ\end{aligned}$$

$$\begin{aligned}x + 60^\circ &= 180^\circ \\x &= 180^\circ - 60^\circ = 120^\circ \quad (D)\end{aligned}$$

04.

Soma dos ângulos que apontam para um lado será igual a soma dos que apontam para o outro, em 2 paralelos, então: \rightarrow Teorema das linhas

$$\begin{aligned}80^\circ + 40^\circ &= 120^\circ \\120^\circ - 30^\circ &= 90^\circ\end{aligned}$$

$x + 50 + 40 = 180^\circ$
 $x = 90^\circ$

$a + 40 + 90 = 180$
 $a = 50$

$w + 80 + 60 = 180^\circ$
 $w = 40$

$y + 30 = 90$
 $y = 60$

05. $\frac{5}{4} = (180^\circ - x) \rightarrow x + 5x = 180$
 $4x + 5x = 720$
 $9x = 720$
 $x = \frac{720}{9}$
 $x = 80$ (A)

06. $90^\circ - x \rightarrow x = (90 - x)$
 $2x = 90$
 $3x = 90$
 $x = \frac{90}{3} = 30^\circ$ (A)

07. $3(90^\circ - x) = (180^\circ - x)$
 $9(90^\circ - x) = 180^\circ - x$
 $810 - 9x = 180^\circ - x$
 $810 - 180 = 9x - x$
 $630 = 8x$
 $x = \frac{630}{8} = 78,75^\circ = 78 + 0,75(60') = 78^\circ 45'$
 (E)

OBS: Fiz duas resoluções para a 4 pois não sabia se a com teorema dos bicos iria valer.