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Lista de Exercícios – Aula 18

Lista de Exercícios

1-

Ângulo raso

$60°$

$$60° + X = 180°$$
$$X = 180° - 60°$$
$$\boxed{X = 120°} \quad \text{Alternativa } \textcircled{C}$$

2-

$r // s$

$180°$ $120°$

$$\text{Soma dos ângulos internos} = 180°$$
$$60° + 90° + X = 180$$
$$X = 180° - 60° - 90°$$
$$X = 180° - 150°$$
$$\boxed{X = 30°} \quad \text{Alternativa } \textcircled{B}$$

$180° - 120° = y$
$y = 60°$

3-

Ângulo raso

x a

$2a$ $2a$

$$2a + a = 180°$$
$$3a = 180°$$
$$a = \frac{180°}{3}$$
$$a = 60°$$

$$X + a = 180°$$
$$X + 60° = 180°$$
$$X = 180° - 60°$$
$$\boxed{X = 120°} \quad \text{Alternativa } \textcircled{D}$$

4-

$30°$ $80°$ x $40°$
$150°$
$\overset{*}{x}$
Suplementares
x
x
Alternos
internos $40°$
Suplementares

* Ângulos internos de 1 quadrilátero somam $360°$.

$$80° + 150° + y + 40° = 360°$$
$$y = 360° - 80° - 150° - 40°$$
$$y = 360° - 270°$$
$$y = 90°$$

→ x e y Suplementares: $y + x = 180°$
$$90° + x = 180°$$
$$x = 180° - 90° \rightarrow \boxed{x = 90°}$$

5- Ângulo $= x$ / Seu suplemento $= 180 - x$

$$x = \frac{5}{4} \cdot (180 - x) \quad\rightarrow\quad \begin{array}{l} 4x = 900 - 5x \\ 4x + 5x = 900 \\ 9x = 900 \\ x = \dfrac{900}{9} \end{array}$$

$$x = \frac{900 - 5x}{4}$$

$$\boxed{x = 100°}$$ Alternativa Ⓐ

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6 - Ângulo $= x$ / Seu complemento: $90° - x$

$$x = \frac{90 - x}{2} \quad=x \quad\rightarrow\quad \begin{array}{l} 2x + x = 90 \\ 3x = 90 \\ x = \dfrac{90}{3} \end{array} \rightarrow \boxed{x = 30°}$$ Alternativa Ⓐ

$$2x = 90 - x$$

7 - Ângulo = x / Complemento = 90° - x / Suplemento = 180° - x

$$3 \cdot \frac{(90-x)}{3} = \frac{180 - x}{3}$$

$8x = 630$

$x = \dfrac{630}{8}$

$3 \cdot 3 (90 - x) = 180 - x$

$9 (90 - x) = 180 - x$

$810 - 9x = 180 - x$

$9x - x = 810 - 180$

$\boxed{x = 78,75}$

$78° (0,75 \cdot 60)'$

$\boxed{78° \ 45'}$ Alternativa Ⓔ