

GABARITO COMENTADO

MATEMÁTICA

01 Letra C.
Jan → x

$$\text{Fev} \rightarrow x - \frac{1}{10}x = \frac{9x}{10}$$

$$\text{Mar} \rightarrow \frac{1}{5} \cdot \frac{9x}{10} + \frac{9x}{10} = \frac{54x}{50}$$

x → 100%

$$\rightarrow y = 108\%$$

$$\frac{54x}{50} \rightarrow y$$

$$108\% - 100\% = 8\%$$

02 Letra C.

Se a = 4 → 3144. Logo, é divisível por 3 e 4. Conseqüentemente, é divisível por 12.

03 Letra A.

m.m.c. (15, 20, 24) = 120 dias.

04 Letra E.

$$\frac{x}{y} = \frac{xz}{y} = \frac{\frac{2}{3} \cdot \frac{9}{5}}{\frac{6}{5}} = \frac{6}{5} \cdot \frac{5}{3} = 2 \quad (I)$$

$$\frac{x}{y} = \frac{xz}{y} = \frac{x \cdot \frac{1}{4}}{\frac{7}{8}} = x \cdot \frac{1}{4} \cdot \frac{8}{7} = \frac{2x}{7} \quad (II)$$

Fazendo (I) = (II), temos: $\frac{2x}{7} = 2 \rightarrow x = 7$

05 Letra E.

$$\begin{array}{r} 4^\circ 50' \\ x \quad 20 \end{array}$$

$$\begin{array}{r} 88^\circ 10' \\ 96^\circ 40' \end{array}$$

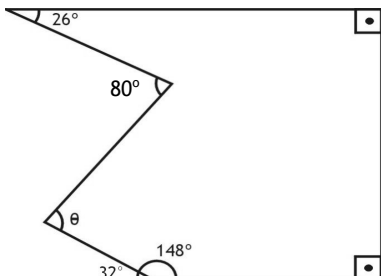
06 Letra B.

$$1\text{gr} \text{ --- } \frac{90}{100}$$

$$x \text{ --- } 54$$

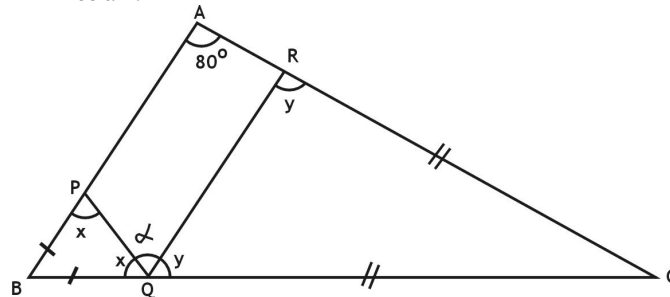
$$\frac{90}{100} x = 54 \rightarrow x = 60\text{gr}$$

07 Letra A.



$$\theta + 26^\circ = 80^\circ + 32 \rightarrow \theta = 86^\circ$$

08 Letra D.

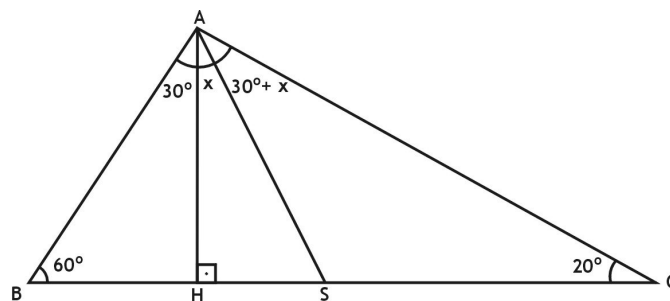


$$x + y + \alpha = 180^\circ \rightarrow x + y = 180^\circ - \alpha$$

$$\alpha + 80^\circ + 180^\circ - x + 180^\circ - y = 360^\circ \rightarrow x + y = \alpha + 80^\circ$$

Portanto: $\alpha + 80^\circ = 180^\circ - \alpha$
 $2\alpha = 100^\circ \rightarrow \alpha = 50^\circ$

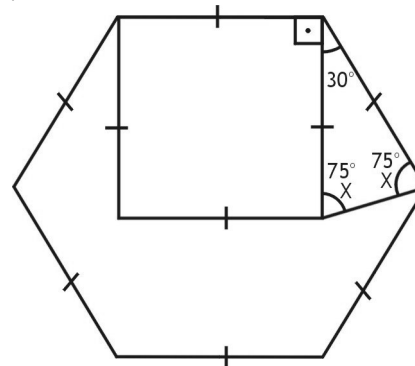
09 Letra A.



$$60^\circ + 20^\circ + 30^\circ + x + 30^\circ + x = 180^\circ$$

$$2x = 40^\circ \rightarrow x = 20^\circ$$

10 Letra B.



$$a_i = \frac{180^\circ(n-2)}{n}$$

$$a_i = \frac{180^\circ \cdot 4}{6} = 120^\circ$$

Logo: x = 75°

11 Letra C.

$$2x \cdot 3^2 \cdot 5^3 \rightarrow 60 \text{ divisores}$$

$$(x + 1) \cdot 3 \cdot 4 = 60$$

$$x + 1 = 5 \rightarrow x = 4$$

12 Letra D.
 $7,5 \text{ — } 100\%$

$8,4 \text{ — } x$

$$\rightarrow 7,5x = 840$$

$$x = 112$$

Portanto: $112\% - 100\% = 12\%$

13 Letra A.
soldados

\uparrow
 120
 150

dias
 30
 \downarrow
 x

$$\frac{30}{x} = \frac{150}{120} \rightarrow x = 24$$

14 Letra C.

1ª prova = 8

2ª prova = 7

3ª prova = 5

4ª prova = 4

$$m_a = \frac{8+7+5+4}{4} = \frac{24}{4} = 6$$

$$m_p = \frac{8 \cdot 1 + 7 \cdot 2 + 5 \cdot 3 + 4 \cdot 4}{1+2+3+4} = \frac{8+14+15+16}{10} = 5,3$$

$$6 - 5,3 = 0,7$$

15 Letra E.

