

Atividades sobre radiação da aula que eu faltei 10/05 e as outras que eram para enviar no ANP de equações porém ninguém me avisou como expliquei pra professora.

Email da sua resposta aceitando e indicando para enviar nesse pdf

"Oi Fernanda , desta vez eu aceitei essa em atraso para completar, porém procure realizar no prazo , salvo algum motivo médico, pois não será mais aceito em atraso para completar tarefas ok. Att, Prof. Roberta"

Radiação

P64
 (29) a) b) 30 Indique o crescente
 a) $\sqrt{43} \approx 6,6$ b) $\sqrt{100} = 10$
 c) $\sqrt{36} = 6$ d) $\sqrt{121} = 11$
 e) $\sqrt{49} = 7$ f) $\sqrt{144} = 12$

b) $\sqrt{34} \approx 5,8$ c) $\sqrt{49} = 7$ d) $\sqrt{121} = 11$
 e) $\sqrt{144} = 12$ f) $\sqrt{169} = 13$

P65
 (41) Para $\sqrt{17}$ a) calculadora manual b) calculadora científica
 a) $\sqrt{17} \approx 4,12$ b) $\sqrt{17} \approx 4,1231056256$

a) Aproximado
 a) $\sqrt{17} \approx 4,12$ b) $\sqrt{17} \approx 4,1231056256$

52) $\frac{12}{6} = 2$ $\frac{12}{6} = 2$ $\frac{12}{6} = 2$ $\frac{12}{6} = 2$ $\frac{12}{6} = 2$ $\frac{12}{6} = 2$

7) a) $\frac{12}{6} = 2$ b) $\frac{12}{6} = 2$ c) $\frac{12}{6} = 2$ d) $\frac{12}{6} = 2$

P27
 56) a) b) c) d) e) f) g) h) i) j) k) l) m) n) o) p) q) r) s) t) u) v) w) x) y) z)

P30
 66) a) $\sqrt{14} \cdot \sqrt{2} = \sqrt{28}$ b) $\sqrt{10} \cdot \sqrt{5} = \sqrt{50}$
 c) $\sqrt{12} \cdot \sqrt{3} = \sqrt{36}$ d) $\sqrt{18} \cdot \sqrt{2} = \sqrt{36}$
 e) $\sqrt{20} \cdot \sqrt{5} = \sqrt{100}$ f) $\sqrt{25} \cdot \sqrt{4} = \sqrt{100}$
 g) $\sqrt{30} \cdot \sqrt{3} = \sqrt{90}$ h) $\sqrt{40} \cdot \sqrt{5} = \sqrt{200}$
 i) $\sqrt{45} \cdot \sqrt{3} = \sqrt{135}$ j) $\sqrt{50} \cdot \sqrt{2} = \sqrt{100}$
 k) $\sqrt{60} \cdot \sqrt{3} = \sqrt{180}$ l) $\sqrt{70} \cdot \sqrt{2} = \sqrt{140}$
 m) $\sqrt{80} \cdot \sqrt{5} = \sqrt{400}$ n) $\sqrt{90} \cdot \sqrt{3} = \sqrt{270}$
 o) $\sqrt{100} \cdot \sqrt{4} = \sqrt{400}$ p) $\sqrt{120} \cdot \sqrt{3} = \sqrt{360}$
 q) $\sqrt{140} \cdot \sqrt{5} = \sqrt{700}$ r) $\sqrt{160} \cdot \sqrt{4} = \sqrt{640}$
 s) $\sqrt{180} \cdot \sqrt{3} = \sqrt{540}$ t) $\sqrt{200} \cdot \sqrt{5} = \sqrt{1000}$
 u) $\sqrt{240} \cdot \sqrt{6} = \sqrt{1440}$ v) $\sqrt{280} \cdot \sqrt{7} = \sqrt{1960}$
 w) $\sqrt{320} \cdot \sqrt{8} = \sqrt{2560}$ x) $\sqrt{360} \cdot \sqrt{9} = \sqrt{3240}$
 y) $\sqrt{400} \cdot \sqrt{10} = \sqrt{4000}$ z) $\sqrt{440} \cdot \sqrt{11} = \sqrt{4840}$

74) a) $\sqrt{14} \cdot \sqrt{2} = \sqrt{28}$ b) $\sqrt{10} \cdot \sqrt{5} = \sqrt{50}$
 c) $\sqrt{12} \cdot \sqrt{3} = \sqrt{36}$ d) $\sqrt{18} \cdot \sqrt{2} = \sqrt{36}$
 e) $\sqrt{20} \cdot \sqrt{5} = \sqrt{100}$ f) $\sqrt{25} \cdot \sqrt{4} = \sqrt{100}$
 g) $\sqrt{30} \cdot \sqrt{3} = \sqrt{90}$ h) $\sqrt{40} \cdot \sqrt{5} = \sqrt{200}$
 i) $\sqrt{45} \cdot \sqrt{3} = \sqrt{135}$ j) $\sqrt{50} \cdot \sqrt{2} = \sqrt{100}$
 k) $\sqrt{60} \cdot \sqrt{3} = \sqrt{180}$ l) $\sqrt{70} \cdot \sqrt{2} = \sqrt{140}$
 m) $\sqrt{80} \cdot \sqrt{5} = \sqrt{400}$ n) $\sqrt{90} \cdot \sqrt{3} = \sqrt{270}$
 o) $\sqrt{100} \cdot \sqrt{4} = \sqrt{400}$ p) $\sqrt{120} \cdot \sqrt{3} = \sqrt{360}$
 q) $\sqrt{140} \cdot \sqrt{5} = \sqrt{700}$ r) $\sqrt{160} \cdot \sqrt{4} = \sqrt{640}$
 s) $\sqrt{180} \cdot \sqrt{3} = \sqrt{540}$ t) $\sqrt{200} \cdot \sqrt{5} = \sqrt{1000}$
 u) $\sqrt{240} \cdot \sqrt{6} = \sqrt{1440}$ v) $\sqrt{280} \cdot \sqrt{7} = \sqrt{1960}$
 w) $\sqrt{320} \cdot \sqrt{8} = \sqrt{2560}$ x) $\sqrt{360} \cdot \sqrt{9} = \sqrt{3240}$
 y) $\sqrt{400} \cdot \sqrt{10} = \sqrt{4000}$ z) $\sqrt{440} \cdot \sqrt{11} = \sqrt{4840}$

P32 77
 a) $\sqrt{2} + 1$ b) $\sqrt{2} - 1$ c) $\sqrt{2} \cdot 1$ d) $\sqrt{2} \div 1$
 e) $\sqrt{2} + 1$ f) $\sqrt{2} - 1$ g) $\sqrt{2} \cdot 1$ h) $\sqrt{2} \div 1$
 i) $\sqrt{2} + 1$ j) $\sqrt{2} - 1$ k) $\sqrt{2} \cdot 1$ l) $\sqrt{2} \div 1$
 m) $\sqrt{2} + 1$ n) $\sqrt{2} - 1$ o) $\sqrt{2} \cdot 1$ p) $\sqrt{2} \div 1$
 q) $\sqrt{2} + 1$ r) $\sqrt{2} - 1$ s) $\sqrt{2} \cdot 1$ t) $\sqrt{2} \div 1$
 u) $\sqrt{2} + 1$ v) $\sqrt{2} - 1$ w) $\sqrt{2} \cdot 1$ x) $\sqrt{2} \div 1$
 y) $\sqrt{2} + 1$ z) $\sqrt{2} - 1$

78) a) $\sqrt{49} = 7$ b) $\sqrt{16} = 4$ c) $\sqrt{9} = 3$ d) $\sqrt{25} = 5$
 e) $\sqrt{36} = 6$ f) $\sqrt{49} = 7$ g) $\sqrt{64} = 8$ h) $\sqrt{81} = 9$
 i) $\sqrt{100} = 10$ j) $\sqrt{121} = 11$ k) $\sqrt{144} = 12$ l) $\sqrt{169} = 13$
 m) $\sqrt{196} = 14$ n) $\sqrt{225} = 15$ o) $\sqrt{256} = 16$ p) $\sqrt{289} = 17$
 q) $\sqrt{324} = 18$ r) $\sqrt{361} = 19$ s) $\sqrt{400} = 20$ t) $\sqrt{441} = 21$
 u) $\sqrt{484} = 22$ v) $\sqrt{529} = 23$ w) $\sqrt{576} = 24$ x) $\sqrt{625} = 25$
 y) $\sqrt{676} = 26$ z) $\sqrt{729} = 27$

Ex. que estavam no SIGMA
 e não foi passado na aula

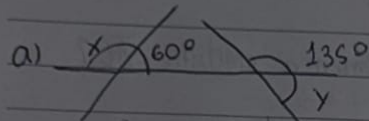
P80
 23 Indique o maior
 a) $\sqrt{36} = 6$ b) $\sqrt{49} = 7$ c) $\sqrt{64} = 8$ d) $\sqrt{81} = 9$
 e) $\sqrt{100} = 10$ f) $\sqrt{121} = 11$ g) $\sqrt{144} = 12$ h) $\sqrt{169} = 13$
 i) $\sqrt{196} = 14$ j) $\sqrt{225} = 15$ k) $\sqrt{256} = 16$ l) $\sqrt{289} = 17$
 m) $\sqrt{324} = 18$ n) $\sqrt{361} = 19$ o) $\sqrt{400} = 20$ p) $\sqrt{441} = 21$
 q) $\sqrt{484} = 22$ r) $\sqrt{529} = 23$ s) $\sqrt{576} = 24$ t) $\sqrt{625} = 25$
 u) $\sqrt{676} = 26$ v) $\sqrt{729} = 27$ w) $\sqrt{784} = 28$ x) $\sqrt{841} = 29$
 y) $\sqrt{900} = 30$ z) $\sqrt{961} = 31$

Ângulos e Triângulos

p242 19,20

p238 -10,13

(10) Calcule as medidas

a) $x + 60^\circ = 180^\circ$

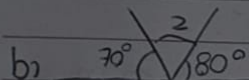
$$x = 180^\circ - 60^\circ$$

$$x = 120^\circ$$

$$135^\circ + y = 180^\circ$$

$$y = 180^\circ - 135^\circ$$

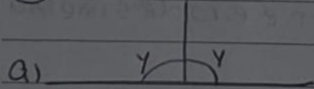
$$y = 45^\circ$$

b) $70^\circ + z + 80^\circ = 180^\circ$

$$z = 180^\circ - 70^\circ - 80^\circ$$

$$z = 30^\circ$$

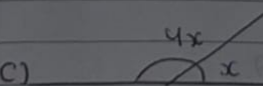
(13) Calcule as medidas

a) $y + y = 180^\circ$

$$2y = 180^\circ \rightarrow y = 90^\circ$$

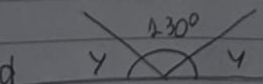
b) $2x + x = 90^\circ \rightarrow x = 30^\circ$

$$3x = 90^\circ \rightarrow x = 30^\circ$$

c) $4x + x = 180^\circ \rightarrow x = 36^\circ$

$$5x = 180^\circ \rightarrow x = 36^\circ$$

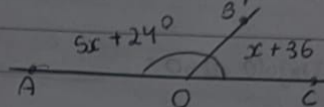
$$x = 36^\circ$$

d) $y + 130^\circ + y = 180^\circ \rightarrow 2y = 50^\circ$

$$2y + 130^\circ = 180^\circ \rightarrow y = 25^\circ$$

$$2y = 180^\circ - 130^\circ \rightarrow y = 25^\circ$$

(9) Observe a figura e responda.



a) qual valor de x?

$$5x + 24^\circ + x + 36^\circ = 180^\circ$$

$$6x + 60^\circ = 180^\circ$$

$$6x = 180^\circ - 60^\circ$$

$$6x = 120^\circ$$

$$x = 20^\circ$$

b) qual medida do ângulo AÔB?

$$5 \cdot 20^\circ + 24^\circ \rightarrow R = 124^\circ$$

$$100^\circ + 24^\circ$$

c) qual medida do ângulo BÔC?

$$20^\circ + 36^\circ \rightarrow R = 56^\circ$$

(20) Calcule o valor de x

$$2x + 3x + 40^\circ = 90^\circ$$

$$2x + 3x + 40^\circ = 90^\circ \rightarrow 5x = 50^\circ$$

$$5x + 40^\circ = 90^\circ$$

$$5x = 90^\circ - 40^\circ$$

$$5x = 50^\circ$$

$$x = 10^\circ$$

p244 25,36,37

25) quantos minutos tem 50°?

$$5 \cdot 60 = 300'$$

b) quantos segundos tem 1° 1' 1''?

$$1^\circ = 60 \text{ minutos}$$

$$1' = 60 \text{ segundos}$$

$$406'$$

$$406' \times 60s = 3660' + 1'' = 3661''$$

spiral

2) determine a medida em graus e minutos.

a) a metade de $90^\circ = 45^\circ$

$45 \div 2 = 22,5$

b) $\frac{1}{8}$ do ângulo raso = $22^\circ 30'$

$180 \div 8 = 22,5$

$180 \div 8 = 22,5$

c) a metade do metade de um ângulo raso

$90 \div 2 = 45$ $45 \div 2 = 22,5$

$22^\circ 30'$

37) O valor de x na figura é?

$5x - 10^\circ + 2x + 40^\circ + x + 60^\circ = 360^\circ$

$8x + 90^\circ = 360^\circ$

$8x = 360^\circ - 90^\circ$

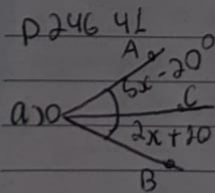
$8x = 270^\circ$

$x = \frac{270^\circ}{8}$

$x = 33,75$

$60 + 15 = 75$

$33^\circ 45'$

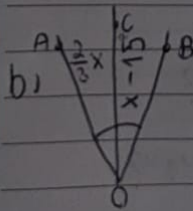


$5x - 20^\circ = 2x + 10^\circ$

$5x - 2x = 20^\circ + 10^\circ$

$3x = 30^\circ$

$x = 10^\circ$

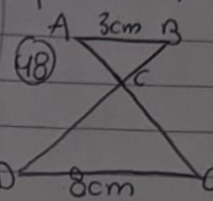


$\frac{2}{3}x = x - 15^\circ$

$2x - x = 15^\circ \cdot 3$

$x = 45^\circ$

p244 - 48, 49 - 51



CPG triângulo equi-
lateral, ACB inscrito
perímetro é 32 cm

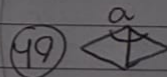
Qual é em cm a medida AC?

$32 - 24 + 3$

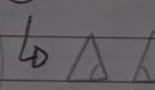
$8 - 3 = 5$

$5 \div 2 = 2,5 \text{ cm}$

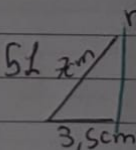
os dois lados
do triângulo



o ângulo a é?



o obtuso é mede 120
maior que 90



r é eixo de simetria

a) 7°

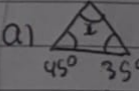
b) $7 \cdot 3 = 21$

$3,5 + 3,5 = 7 \text{ cm}$

c) É um equilátero, pois possui
lados iguais

256 - 54, 59

54 - determine o x



$x + 45^\circ + 35^\circ = 180^\circ$

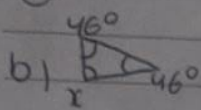
$x + 45^\circ = 180^\circ - 35^\circ$

$x + 45^\circ = 145^\circ$

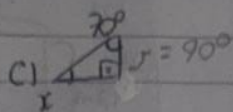
$x = 100^\circ$

spiral

54

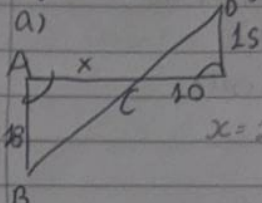


$$\begin{aligned} x + 46^\circ + 46^\circ &= 180^\circ \\ x + 46 &= 180^\circ - 46 \\ x + 46 &= 134^\circ \\ x &= 134^\circ - 46 \\ x &= 88^\circ \end{aligned}$$



$$\begin{aligned} x + 70^\circ &= 90^\circ \\ x &= 90^\circ - 70^\circ \\ x &= 20^\circ \end{aligned}$$

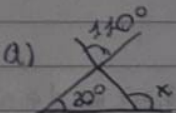
20 Se os ângulos com "marcas iguais" são congruentes, x?



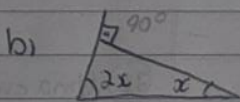
$$\frac{18}{15} \times \frac{x}{10} = \frac{15}{180}$$

$$x = 12$$

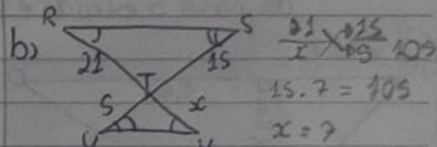
59) Determine x



$$\begin{aligned} 110^\circ + 30^\circ &= 140^\circ \\ x &= 180^\circ - 140^\circ \\ x &= 40^\circ \end{aligned}$$

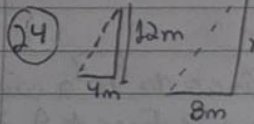


$$\begin{aligned} 2x + x &= 90^\circ \\ 3x &= 90^\circ \\ x &= 30^\circ \end{aligned}$$



$$\begin{aligned} \frac{21}{5} \times \frac{x}{15} &= \frac{15}{105} \\ 15 \cdot 7 &= 105 \\ x &= 7 \end{aligned}$$

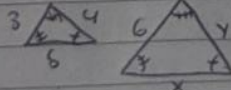
P 175 24, 27



$$\begin{aligned} \frac{x}{24} \times \frac{4}{3} &= \frac{3}{9} \\ 4 \cdot 24 &= 96 \\ x &= 24m \end{aligned}$$

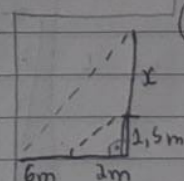
172 17, 19, 20

17-Determine x e y sabendo que os triângulos são semelhantes



$$\begin{aligned} \text{maior } \frac{6}{3} &= \frac{x}{3} \Rightarrow x = 6 \\ \text{menor } \frac{4}{3} &= \frac{y}{3} \Rightarrow y = 4 \end{aligned}$$

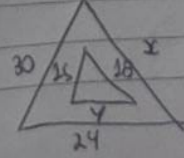
$$x = 6 \quad y = 4$$



27

$$\begin{aligned} \frac{x}{2,5} \times \frac{6}{3} &= \frac{9}{3} \\ 2 \cdot 4,5 &= 9 \\ x &= 4,5m \end{aligned}$$

19



$$\begin{aligned} \text{maior } \frac{30}{25} &= \frac{x}{24} \Rightarrow x = 28,8 \\ \text{menor } \frac{25}{24} &= \frac{y}{24} \Rightarrow y = 24 \end{aligned}$$

$$y = 24 \quad x = 28,8$$

spiral

Teorema de Pitágoras

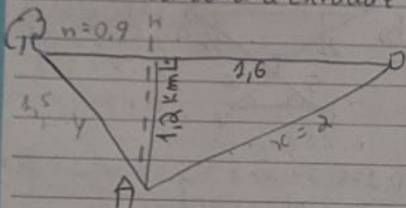
p 196 - 24

p 197/198 - 25, 27, 31

p 187 - 2, 4, 6

p 190 - 8 (c, d)

pg 196 24 Na figura abaixo, a distância da casa à estrada é 1,2 km



a) Qual a distância da casa à estrada?
b) Qual é a menor distância da A à estrada?
c) Qual é a menor distância da casa à estrada?

$$x^2 = 1,2^2 + 1,6^2$$

$$x^2 = 1,44 + 2,56$$

$$x^2 = 4,00$$

$$x = \sqrt{4,00} = 2 \text{ km} \quad \text{c) } (2 \text{ km})$$

altura

$$1,2^2 = 1,6 \cdot n$$

$$1,44 / 1,6 = n$$

$$0,9 = n$$

b) $y^2 = 0,9^2 + 1,2^2$

$$y^2 = 0,81 + 1,44$$

$$y = \sqrt{2,25}$$

$$y = 1,5 \text{ km}$$

spiral

S T Q Q S S D

197

$$a^2 = (1,2)^2 + (0,6)^2$$

$$a^2 = 1,44 + 0,36$$

$$a^2 = 1,80$$

$$a = \sqrt{1,80} \quad a = 1,34$$

27) Qual é a altura do funil?

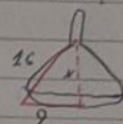
$$x^2 + 9^2 = 15^2$$

$$x^2 + 81 = 225$$

$$x^2 = 225 - 81$$

$$x^2 = 144$$

$$x = \sqrt{144} \rightarrow x = 12$$



31) Uma escada tem 3,20 m de altura quando está fechada. Qual é a altura da escada aberta, sabendo-se que a distância máxima entre seus pés é 2,40 m?

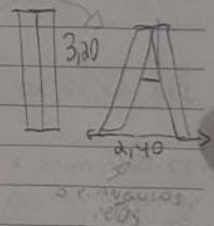
$$\rightarrow 2,4 / 2 = 1,20$$

$$a^2 + 1,2^2 = 3,20^2$$

$$a^2 = 10,24 - 1,44$$

$$a^2 = 8,8$$

$$a = 2,96$$



187

$$x^2 = 8^2 + 15^2$$

$$x^2 = 64 + 225$$

$$x = \sqrt{289}$$

$$x = 17$$

2)

4) Calcule x

a) $x^2 = 8^2 + 15^2$

b) $x^2 = 8^2 + 15^2$

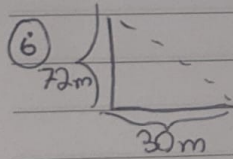
$$(x+5)^2 = 6^2 + (x+3)^2$$

$$x^2 + 10x + 25 = 36 + x^2 + 6x + 9$$

$$4x = 36 + 9 - 25$$

$$4x = 20$$

$$x = 5$$



$$a^2 = 72^2 + 30^2$$

$$a^2 = 5184 + 900$$

$$a = \sqrt{6084}$$

$$a = 78$$

$$4 \times 78 = 312$$

São 3 cabos de 78.

Será gasto quantos m de
cabos? R = 234

190.

⑧ (c, d) não sei como fazer
com dois ângulos