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1. Opção correta: (C)

2.1. Opção correta: (B)

$r = \frac{4}{8} = \frac{1}{2} = 0,5$

2.2. Opção correta: (D)

$r = \frac{6}{2} = 3$

2.3. Opção correta: (C)

$r = \frac{3}{12} = 0,25$

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3.1. Sim.

Ampliação: $r = 2$; Redução: $r = 0,5$

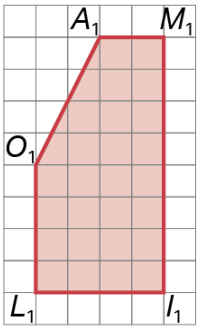
3.2. Não.

$\frac{2}{1} \neq \frac{4}{3}$

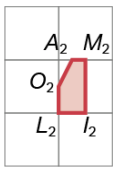
3.3. Não.

$\frac{2}{1} \neq \frac{2}{2}$

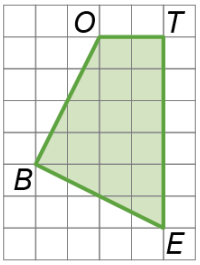
4.1.



4.2.



5.



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6.1. 4 cm

$l = 8$ cm x $0,5 = 4$ cm

6.2. $\frac{1}{3}$

$r = \frac{4}{12} = \frac{1}{3}$

7.1. **a)** $\frac{2}{3}$

$r = \frac{4}{6} = \frac{2}{3}$

b) 4

$r = \frac{4}{1} = 4$

c) 6

$r = \frac{6}{1} = 6$

7.2. **a)** 12 cm

$\overline{EF} = 18\,\text{cm} \times \frac{2}{3} = 12\,\text{cm}$

b) 5 cm

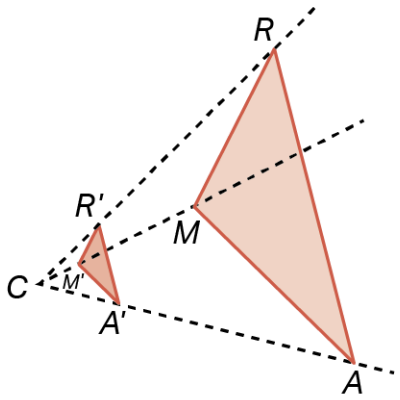
$\overline{EH} = 1,25\,\text{cm} \times 4 = 5\,\text{cm}$

c) 3 cm

$\overline{IJ} = 18\,\text{cm} \times \frac{1}{6} = 3\,\text{cm}$

8.1. $\frac{1}{2}$

8.2.



8.3. **a)** 7 cm

14 cm x 0,5 = 7 cm

b) 10 cm

5 cm x 2 = 10 cm

9. 3 cm

$c = \frac{12\,\text{cm} - 2\,\text{cm} - 2\,\text{cm}}{2} = 4\,\text{cm}$

$r = \frac{6}{4} = \frac{3}{2}$

$l = 2\,\text{cm} \times \frac{3}{2} = 3\,\text{cm}$

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1. **(A)** e **(H):** critério AA

(C) e **(D):** critério AA

(G) e **(F):** critério LLL

(B) e **(E):** critério LAL

2. Opção correta: (C)

Critério AA.

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3.1. $x = \frac{28}{3}$

$\frac{7}{3} = \frac{x}{4} \Leftrightarrow x = 7 \times \frac{4}{3} = \frac{28}{3}$

3.2. $x = 5$

$\frac{7,5}{6} = \frac{x}{4} \Leftrightarrow x = 7,5 \times \frac{4}{6} = 5$

3.3. $x = \frac{25}{4}$

$\frac{16}{10} = \frac{10}{x} \Leftrightarrow x = 10 \times \frac{10}{16} \Leftrightarrow x = \frac{25}{4}$

3.4. $x = \frac{18}{5}$

$\frac{10}{6} = \frac{6}{x} \Leftrightarrow x = 6 \times \frac{6}{10} \Leftrightarrow x = \frac{18}{5}$

4.1. Opção correta: (B)

4.2. $r = \frac{7}{4}$

$r = \frac{7}{4} = 1,75$

4.3. 8,75cm

h = 5 cm x 1,75 = 8,75 cm

5. $\frac{35}{3}$ cm

Os triângulos [*ADC*] e [*EFC*] são semelhantes pelo critério AA. Assim, os lados correspondentes são diretamente proporcionais.

$\frac{6\,\text{cm}}{3,6\,\text{cm}} = \frac{\overline{AC}}{7\text{cm}} \Leftrightarrow \overline{AC} = 6\,\text{cm} \times \frac{7\,\text{cm}}{3,6\,\text{cm}} = \frac{35}{3}\,\text{cm}$

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6. 5 cm

$\frac{8\,\text{cm}}{4\,\text{cm}} = \frac{10\,\text{cm}}{a} \Leftrightarrow a = 4\,\text{cm} \times \frac{10\,\text{cm}}{8\,\text{cm}} = 5\,\text{cm}$

7.1. Opção correta: (C)

7.2. $\frac{\overline{AB}}{\overline{DE}} = \frac{\overline{AC}}{\overline{DC}} = \frac{\overline{BC}}{\overline{EC}}$

7.3. 14,4 cm

$\frac{5\,\text{cm}}{12\,\text{cm}} = \frac{6\,\text{cm}}{x} \Leftrightarrow x = 12\,\text{cm} \times \frac{6\,\text{cm}}{5\,\text{cm}} = 14,4\,\text{cm}$

7.4. 14,31 cm

$\overline{EC} = 36,5\,\text{cm} - 14,4\,\text{cm} - 12\,\text{cm} = \frac{101}{10}\,\text{cm}$

$\frac{5\,\text{cm}}{12\,\text{cm}} = \frac{x}{10,1\,\text{cm}} \Leftrightarrow x = 10,1\text{cm} \times \frac{5\,\text{cm}}{12\,\text{cm}} = \frac{101}{24}\,\text{cm}$

$\frac{101}{10} + \frac{101}{24} = 14,31\text{cm}$

8.1. Critério AA

$E\hat{D}F = 180° - 104° - 24° = 52°$

8.2. $r = \frac{4}{7}$

$r = \frac{2}{3{,}5} = \frac{4}{7}$

8.3. $\overline{AC} = \frac{26}{7}\text{cm}$

$\overline{AC} = 6{,}5\,\text{cm} \times \frac{4}{7} = \frac{26}{7}\text{cm}$

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1.1. 4 cm

$20\,\text{cm} \times \frac{1}{5} = 4\,\text{cm}$

1.2. 54 cm^2

6 cm^2 x 3^2 = 54 cm^2

1.3. 80 cm^2

20 cm^2 x 2^2 = 80 cm^2

2.1. $r = \frac{13}{8}$

$r = \frac{13}{8} = 1{,}625$

2.2. $r = 2$

$r^2 = \frac{32}{8} = 4$; $r = \sqrt{4} = 2$

2.3. $r = 2$

$r^2 = \frac{48}{12} = 4$; $r = \sqrt{4} = 2$

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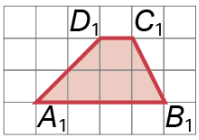
3.1. Opção correta: (D)

6 cm^2 x 3^2 = 54 cm^2

3.2. Opção correta: (D)

8 cm x 4 = 32 cm

4. r = 0,5



5.1. $\frac{4}{3}\text{cm}^2$

$\frac{12\,\text{cm}^2}{9} = \frac{4}{3}\text{cm}^2$

5.2. $\frac{14}{3}\text{cm}$

$r = 3$; $P_Y = \frac{14}{3}\text{cm}$

6.1. 9 cm; 2 cm

$L_{[BELA]}$ = 36 cm : 4 = 9 cm

$L_{[RUMO]}$ = 2 cm

6.2. $r = \frac{2}{9}$

6.3. 9 cm^2

$L_{[MIRO]} = 9\,\text{cm} \times \frac{1}{3} = 3\,\text{cm}$

$A_{[MIRO]} = 3 \times 3 = 9\ \text{cm}^2$

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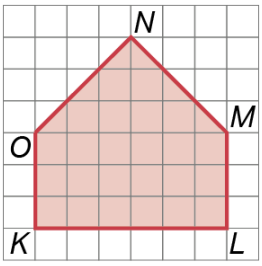
7.1. 3 cm^2

A = 12 cm^2 x $0{,}5^2$ = 3 cm^2

7.2.



7.3. $\overline{FG} = 2\,\text{cm}$ e $\overline{KL} = 6\,\text{cm}$

4 cm x 0,5 = 2 cm; 2 cm x 3 = 6 cm

8.1. 4 cm

6 cm^2 :24 cm^2 = 0,25; 8 cm x 0,5 = 4 cm

8.2. 15 cm

$\frac{4 \times d}{2} = 6 \Leftrightarrow d = \frac{12}{4} \Leftrightarrow d = 3$

$3 \times 5 = 15$

9. 6 cm^2

1,5 cm^2 x 2^2 = 6 cm^2

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1. Opção correta: (A)

2. Opção correta: (B)

3. x = 4 cm e y = 5 cm

x = 10 cm x 0,4 = 4 cm; y = 2 cm x 2,5 = 5 cm

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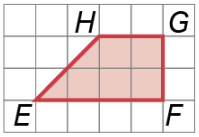
4.



5.1. $\frac{1}{3}$

$r = \frac{8}{72} = \frac{1}{3}$

5.2. 12 cm

4 cm x 3 = 12 cm

6. Opção correta: (C)

Critério LLL

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7.1. Critério AA, pois $A\hat{B}C = C\hat{D}E$ e $D\hat{C}E = A\hat{C}B$ por serem ângulos verticalmente opostos.

7.2. Opção (B)

9 cm : 3 cm = 3

7.3. 16 cm

$\overline{CD} = 4\,\text{cm} \times 3 = 12\,\text{cm}$; $\overline{BD} = 4\,\text{cm} + 12\,\text{cm} = 16\,\text{cm}$

7.4. 36 cm

12 cm x 3 = 36 cm

8. Opção correta: (C)

$l_{[LUAR]}$ = 7 cm; $l_{[PERA]}$ = 14 cm

r = 7 cm : 14 cm = 0,5

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9.1. **a)** $\overline{CF}$

b) $\overline{ED}$

9.2. 2,24 cm

$\overline{FC} = \frac{8 \times 1,4}{5} = 2,24\,\text{cm}$

9.3. 3,1 cm

$\overline{ED} = \frac{11,4 \times 2,24}{8,3} \approx 3,1\text{cm}$