1. In un rettangolo la somma di base e altezza è di cm 42 e la base è 4/3 dell'altezza. Trova l'area.
   + trova il perimetro di un quadrato equivalente.

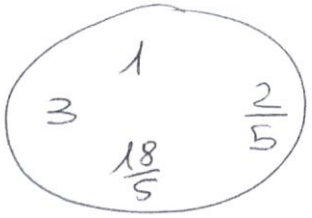
2. In un rettangolo la base è i 3/8 dell'altezza che misura cm 32. Calcola perimetro e area.

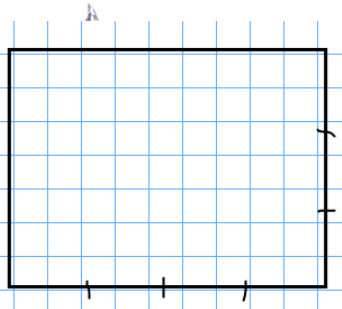
3. Un quadrato ha l'area di cm^2 324. Calcola il perimetro.
   + Calcola il perimetro di un rettangolo equivalente avente l'altezza di cm 9.

1) $\left[\frac{1}{6}\cdot\frac{15}{2}+\frac{5}{8}:\frac{1}{2}+\frac{1}{4}+\left(\frac{3}{4}-\frac{1}{5}\right)\right]+\frac{3}{10}=$

2) $\left[\frac{1}{2}\times\frac{3}{10}-\left(\frac{2}{5}-\frac{1}{4}\right)\right]^3\cdot\frac{2}{7}+\left(\frac{5}{3}+\frac{5}{8}-\frac{7}{24}\right)^3-5=$

3) $\left\{2,\overline{6}-\left[5,75-\left(1,\overline{13}+2,2-2,5\right)-\frac{5}{2}\right]\right\}:(2,5-2,25)=$





b = 4/3 h

b + h = 42 cm

$A_{rett} = A_{quad} = ?$ $p_{quad} = ?$

Risolvo

b + h = 4/3 + 3/3 = 7/3 ≡ 42 cm

U.F. 42 : 7 = 6 cm

b = 4 x 6 = 24 cm

h = 3 x 6 = 18 cm

A = b x h = 24 x 18 = 432 cmq

$l = \sqrt{A} = \sqrt{432} = 20{,}8$ cm

p = 4l = 4 x 20,8 = 83,2 cm

$b = \frac{3}{8}h$ $D_r = 24$ cm

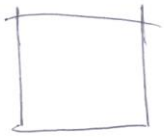
$h = 32$ cm

$2p = ?$ $A = ? = A_{rombo}$

$b = \frac{3}{8}h = \frac{\cancel{32}^{4}}{\cancel{8}} \cdot 3 = 12$ cm

$A = b \times h = 12 \cdot 32 = 384$ cm

$2p = (b+h) \cdot 2 = (12+32) \cdot 2 = 44 \cdot 2 = 88$ cm



$A_q = A_r = 324$ cm²

$2p_q = ?$ $h_{rett} = 9$ cm $2p_{rett} = ?$

$l = \sqrt{A} = \sqrt{324} = 18$ cm

$2p_q = 4l = 4 \cdot 18 = 72$ cm

$b_{rett} = \frac{A}{h} = \frac{324}{9} = 36$ cm

$2p_{rett} = (b+h) \cdot 2 = (36+9) \cdot 2 = 45 \cdot 2 = 90$ cm

1) $= \left[\frac{1}{\cancel{16}_{2}} \cdot \frac{\overset{5}{\cancel{15}}}{2} + \frac{5}{8} \cdot 2 + \frac{1}{4} + \frac{15-4}{20}\right] + \frac{3}{10} =$

$= \left[\frac{5}{4} + \frac{\overset{5}{\cancel{10}}}{\cancel{8}_{4}} + \frac{1}{4} + \frac{11}{20}\right] + \frac{3}{10} = \frac{25+25+5+11}{20} + \frac{3}{10} = \frac{66+6}{20} = \frac{72}{20} = \frac{18}{5}$

2) $= \left[\frac{1}{2} \times \frac{3}{10} - \frac{8-5}{20}\right]^3 \cdot \frac{2}{7} + \left(\frac{40+15-7}{24}\right)^3 - 5 =$

$= \left[\frac{3}{\cancel{20}} - \frac{3}{20}\right]^3 \cdot \frac{2}{7} + \left(\frac{48}{24}\right)^3 - 5 = 2^3 - 5 = 8 - 5 = 3$

3) $= \left\{\frac{26-2}{9} - \left[\frac{575}{100} - \left(\frac{113-11}{90} + \frac{22}{10} - \frac{25}{10}\right) - \frac{5}{2}\right]\right\} : 0{,}25$

$= \left\{\frac{24}{9} - \left[\frac{575}{100} - \frac{102+198-225}{90} - \frac{5}{2}\right]\right\} : \frac{25}{100} =$

$= \left\{\frac{\cancel{24}^{8}}{\cancel{9}_{3}} - \left[\frac{\overset{23}{\cancel{575}}}{\cancel{100}_{4}} - \frac{\overset{5}{\cancel{375}}}{\cancel{90}_{\cancel{30}_{6}}} - \frac{5}{2}\right]\right\} \cdot \frac{\overset{4}{\cancel{100}}}{\cancel{25}} =$

$= \left\{\frac{8}{3} - \frac{69-10-30}{12}\right\} \cdot 4 = \left\{\frac{8}{3} - \frac{29}{12}\right\} \cdot 4 = \frac{32-29}{12} \cdot 4 = \frac{12}{12} = 1$