INSTITUTO FEDERAL
São Paulo
Câmpus Cubatão

TAREFA BÁSICA 28: ÁREA DE POLÍGONOS

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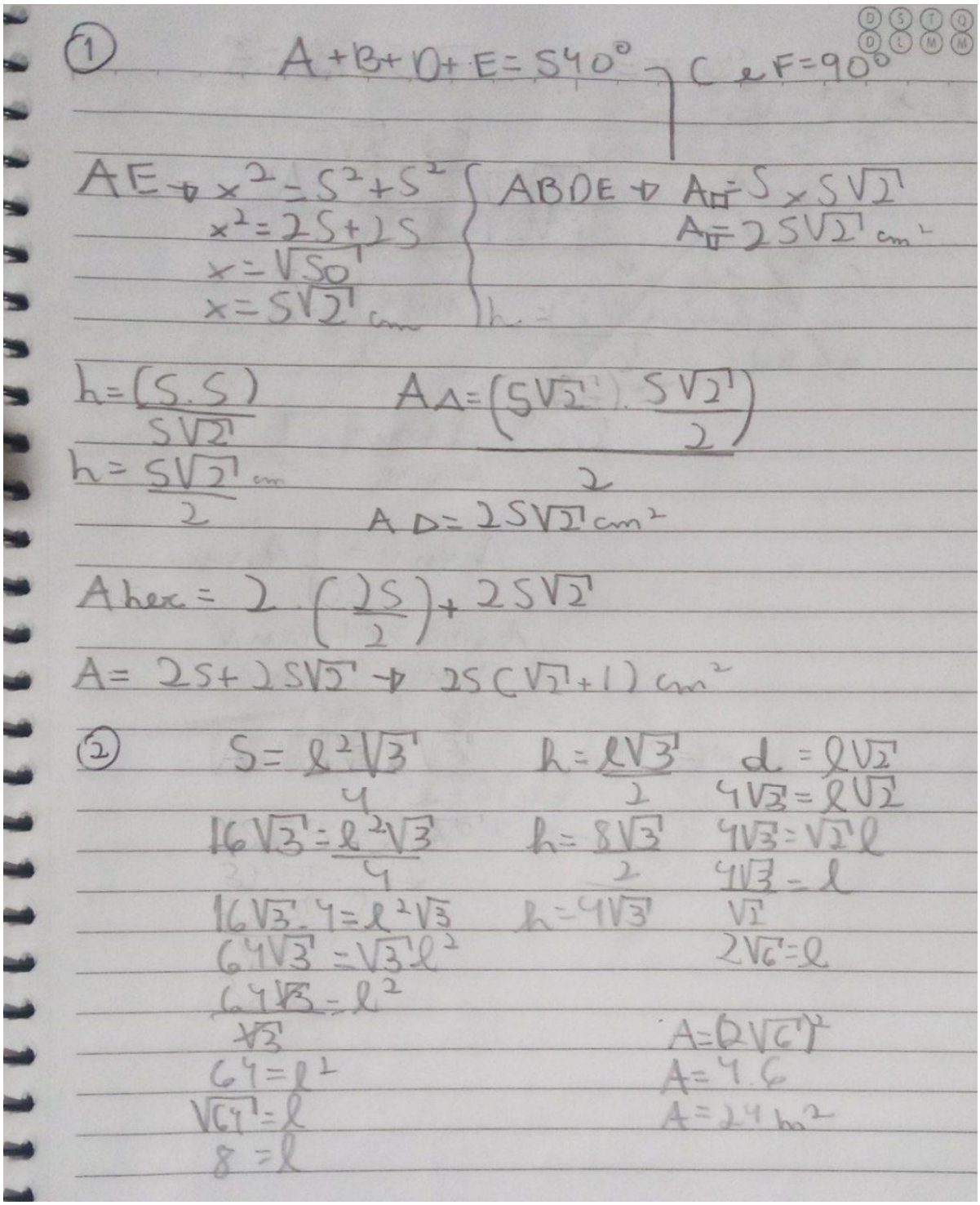
Exercício 1 e 2:



① $A+B+D+E=540°$ → C e F = 90°

AE → $x^2=5^2+5^2$

$x^2=25+25$

$x=\sqrt{50}$

$x=5\sqrt{2}$ cm

ABDE → $A_{\square}=5\times5\sqrt{2}$

$A_{\square}=25\sqrt{2}$ cm²

$h=\frac{(5.5)}{5\sqrt{2}}$

$h=\frac{5\sqrt{2}}{2}$ cm

$A_{\triangle}=\frac{\left(5\sqrt{2}\cdot\frac{5\sqrt{2}}{2}\right)}{2}$

$A_{\triangle}=25\sqrt{2}$ cm²

$A_{hex}=2\left(\frac{25}{2}\right)+25\sqrt{2}$

$A=25+25\sqrt{2}$ → $25(\sqrt{2}+1)$ cm²

② $S=\frac{\ell^2\sqrt{3}}{4}$

$16\sqrt{3}=\frac{\ell^2\sqrt{3}}{4}$

$16\sqrt{3}\cdot4=\ell^2\sqrt{3}$

$64\sqrt{3}=\sqrt{3}\ell^2$

$\frac{64\sqrt{3}}{\sqrt{3}}=\ell^2$

$64=\ell^2$

$\sqrt{64}=\ell$

$8=\ell$

$h=\frac{\ell\sqrt{3}}{2}$

$h=\frac{8\sqrt{3}}{2}$

$h=4\sqrt{3}$

$d=\ell\sqrt{2}$

$4\sqrt{3}=\ell\sqrt{2}$

$4\sqrt{3}=\sqrt{2}\ell$

$\frac{4\sqrt{3}}{\sqrt{2}}=\ell$

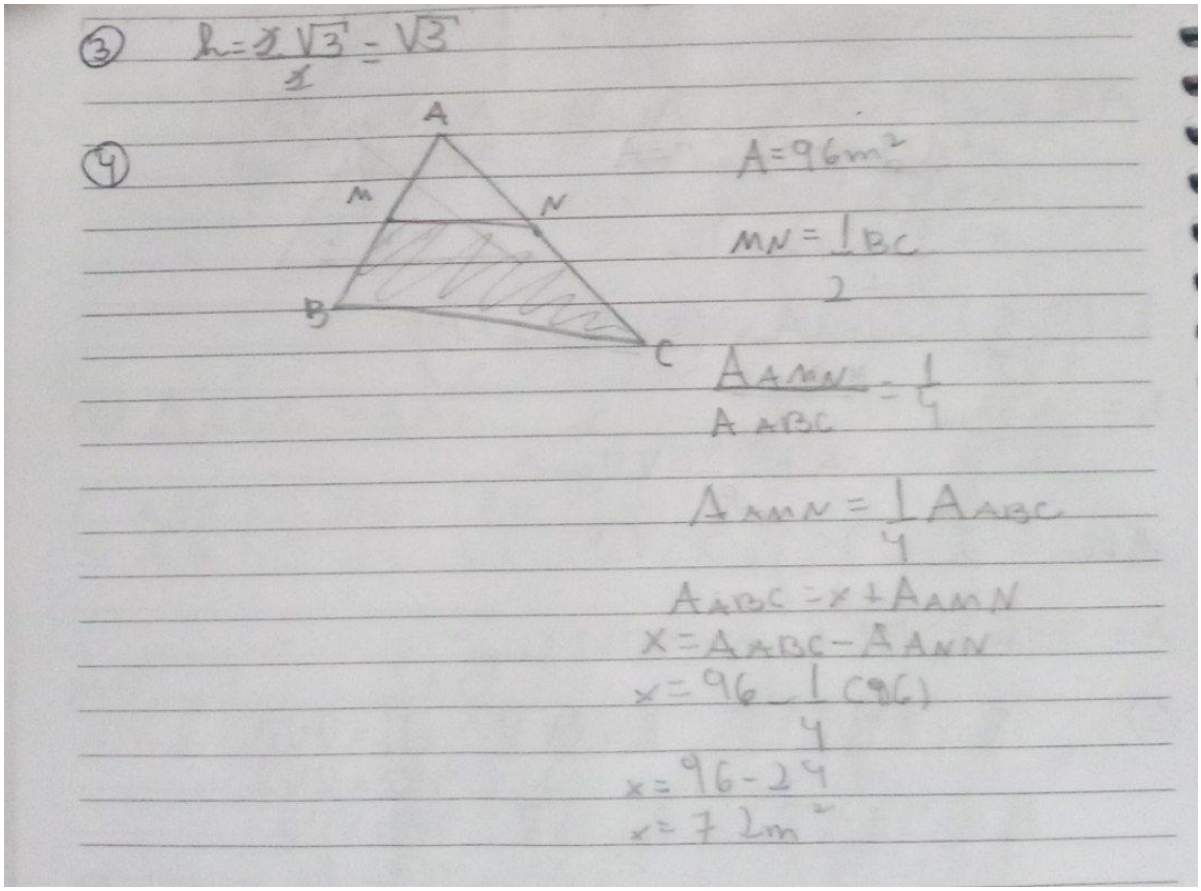
$2\sqrt{6}=\ell$

$A=(2\sqrt{6})^2$

$A=4.6$

$A=24\ m^2$

Exercício 3 e 4:



Exercício 5 e 6: