4) Soma $\hat{A}_{ext} = 360°$ | Soma $\hat{A}_{int} = (N-2)\,180°$

$5 \cdot 360 = (N-2) \cdot 180°$
$1800° = 180N - 360°$
$1800 + 360 = 180N$
$2160/180 = N$
$N = 12 \rightarrow$ dodecágono

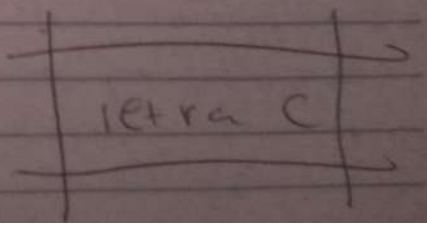
5) $d = 2d(2d-3)/2$
$d = (4d^2 - 6d)/2$
$2d = 4d^2 - 6d$
$4d^2 - 6d - 2d = 0$
$4d^2 - 8d = 0$
$d(4d-8) = 0$

$4d - 8 = 0$
$4d = 8$
$d = 8/4 = 2$

$l = 2 \cdot 2 = 4$, visto que, $l = 2d$

6) $\hat{A}_{int} = 3 \cdot \hat{A}_{ext}$ e $\hat{A}_{ext} = 360°/N$

$180(N-2)/N = 3(360)/N$
$180N - 360° = 1080°$
$180N = 1440$
$N = 1440/180 = 8$



Tarefa básica

1) Nº lados = 12 = n

→ ângulo externo: $360°/n$ | ângulo interno: $(n-2)\,180°/n$

$\hat{A}_{ext} = 360°/12$

$\hat{A}_{ext} = 30°$

$\hat{A}_{int} = (12-2)\,180°/12$

$\hat{A}_{int} = 1800/12$

$\hat{A}_{int} = 150°$

2) Nº lados = 20

Soma dos ângulos internos = $(20-2).180$

$18.180° = 3240°$

3) $\hat{A}_{INT}$ = congruentes

$\hat{A}_{int} = (n-2).180/n$

$\hat{A}_{int} = 180.(n-2)/n$