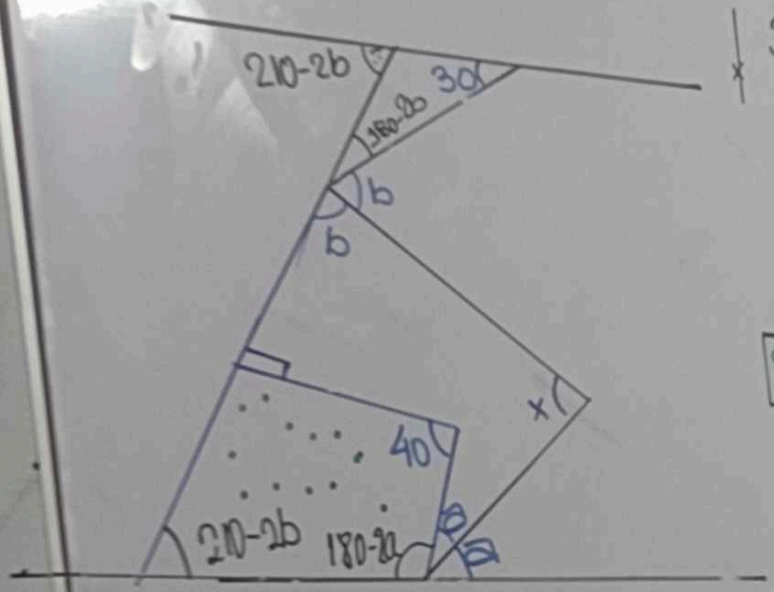


$210-2b+180-2a+40+90=360$

$210-2b+40-2a=90$

$250-90=2b+2a$

$160=2b+2a$

$30+x=a+b$

$30+x=80$

$x=50$

21

SSSSSSSCCCCCC 60

7 6

$S_{60}=120$

36

630 | 2
315 | 3
105 | 5
21 | 7
3 | 3
1

$36(18)-18-72\Gamma-\Gamma+2\Gamma^2=0$

$35(18)-73\Gamma+2\Gamma^2=0$

45 $-2\Gamma \to -2\Gamma$

14 $-\Gamma \to -45\Gamma$

-73Γ

$45=2\Gamma$ $14=\Gamma$

$\alpha-\Gamma$ α $\alpha+\Gamma$ $\alpha-2\Gamma$ $\alpha+2\Gamma$

$5\alpha=180$

$\alpha=36$

$36-45=-$

$36-(28)=8$

$(\alpha-2\Gamma)=\alpha+2\Gamma$

$\alpha^2-4\alpha\Gamma+4\Gamma^2=\alpha+2\Gamma$

$36(36)-4(36)\Gamma+4\Gamma^2=36+2\Gamma$

$18(36)-72\Gamma+2\Gamma^2=18+\Gamma$

$2^{\frac{\sqrt{2}}{10}} = \left(\sqrt[10]{2}\right)^{\sqrt[10]{2}^5}$

$\left(\sqrt[10]{2}\right)^{\sqrt[10]{2}^5} = x^{x^5}$

$\left(\sqrt[10]{2}\right)^2 = x^2$

$\underline{\sqrt[5]{2} = x.}$

13 $\sqrt[3]{x^{\sqrt{x}}} = 3 = \sqrt[3]{27}$

$\sqrt[3]{27^{\sqrt{27}}} \Rightarrow \underline{x = 27.}$

14 $(\sqrt{x})^{\frac{1}{\sqrt{x}}} = \sqrt{2}^1$

$2^{\frac{1}{2}} \quad \therefore \sqrt{4} = 2$

$(\sqrt{4})^{\frac{1}{\sqrt{4}}}$

$\underline{x = 4} \Rightarrow (4)^2 - 2(4) + 1 = \underline{9.}$

15 $x^{x^x} = 2^{-\sqrt{2}}$

$x^{x^x} = \left(\frac{1}{2}\right)^{\sqrt{2}}$

$= \left(\left(\frac{1}{2}\right)^2\right)^{\frac{1}{2}\sqrt{2}} = 2^{\frac{1}{\sqrt{2}}}$

$\frac{2^{\frac{1}{2}}}{2^1} = 2^{-\frac{1}{2}}$

$\left(\frac{1}{4}\right)^{2^{-\frac{1}{2}}}$

$\left(\frac{1}{4}\right)^{\left(\frac{1}{2}\right)^{-\frac{1}{2}}}$ $\left(\frac{1}{2}\right)^{2 \cdot \frac{1}{4}}$

$\left(\frac{1}{4}\right)^{\left(\frac{1}{4}\right)}$ $\left(\left(\frac{1}{2}\right)^{\frac{1}{4}}\right)^{\frac{1}{4} \cdot \frac{1}{2}}$

$\left(\frac{1}{4}\right)^{\left(\frac{1}{4}\right)}$ $\underline{x = \frac{1}{4}.}$

$\Rightarrow 2(n+3) = 2(3) = \underline{6.}$

$\left(\frac{1}{2}\right)^{\frac{1}{2}}$

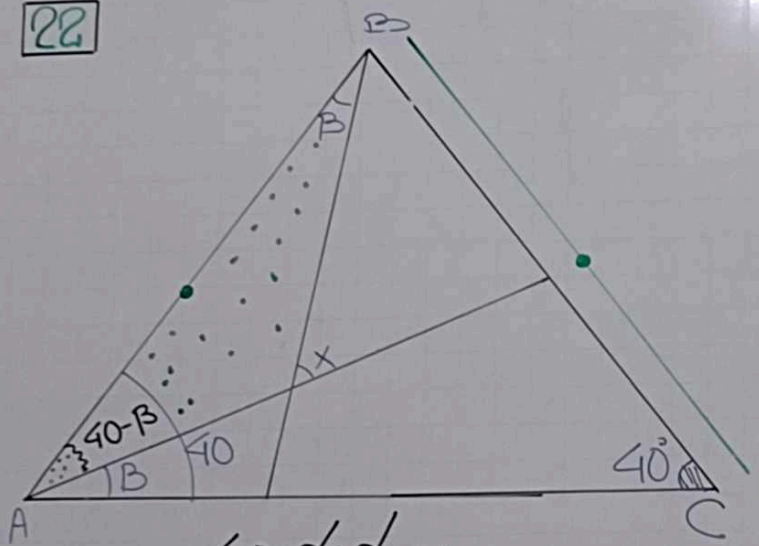
$\left(\frac{1}{2}^{2 \cdot \frac{1}{2}}\right)^{\frac{1}{2}}$

$\left[\left(\frac{1}{2}\right)^2\right]^{\frac{1}{2}}$

$9 +$

$\therefore$ HA

22

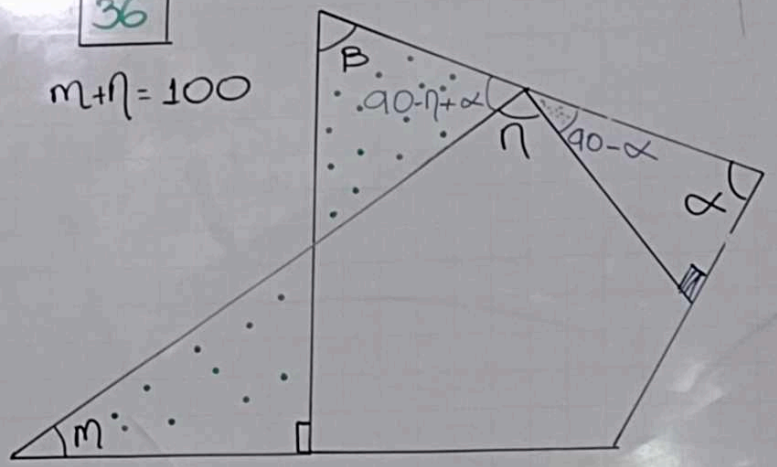


$40-\beta+\beta=x$

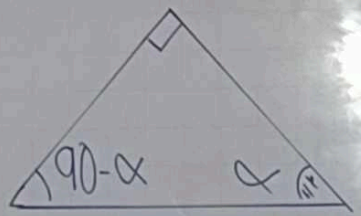
$40=x$

36

$m+n=100$



$m+90=\beta+90-n+\alpha$

$m+n=\alpha+\beta$

$100=\alpha+\beta$