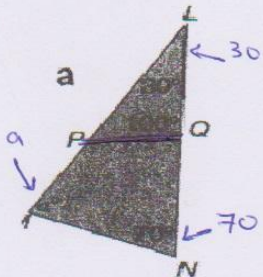
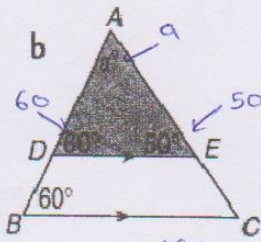


More Numerical Exercise

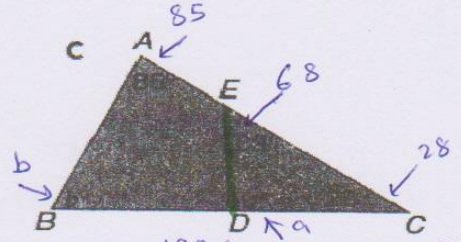
Part 1 Find the value of the pronumeral in each of the following.



$$\begin{aligned}
 1 + 2 + 3 &= 180 \\
 30 + 70 + a &= 180 \\
 100 + a &= 180 \\
 a &= 180 - 100 \\
 \boxed{a = 80^\circ}
 \end{aligned}$$

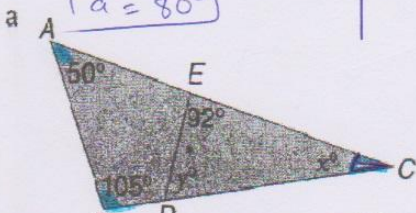


$$\begin{aligned}
 1 + 2 + 3 &= 180 \\
 50 + 60 + a &= 180 \\
 110 + a &= 180 \\
 a &= 180 - 110 \\
 \boxed{a = 70^\circ}
 \end{aligned}$$



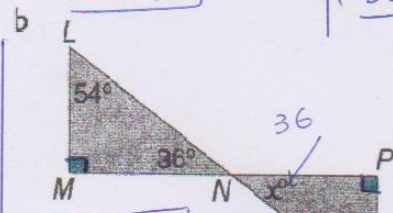
$$\begin{aligned}
 1 + 2 + 3 &= 180 \\
 28 + 85 + b &= 180 \\
 113 + b &= 180 \\
 b &= 180 - 113 \\
 \boxed{b = 67^\circ}
 \end{aligned}$$

$$\begin{aligned}
 1 + 2 + 3 &= 180 \\
 28 + 68 + a &= 180 \\
 94 + a &= 180 \\
 a &= 180 - 94 \\
 \boxed{a = 86^\circ}
 \end{aligned}$$

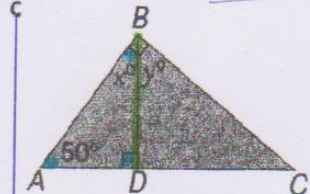


$$\begin{aligned}
 1 + 2 + 3 &= 180 \\
 105 + 50 + x &= 180 \\
 155 + x &= 180 \\
 x &= 180 - 155 \\
 \boxed{x = 25}
 \end{aligned}$$

$$\begin{aligned}
 1 + 2 + 3 &= 180 \\
 y + 92 + 25 &= 180 \\
 y + 117 &= 180 \\
 y &= 180 - 117 \\
 \boxed{y = 63^\circ}
 \end{aligned}$$



$$\begin{aligned}
 \boxed{x = 36^\circ} \\
 \text{vertically opposite} \\
 1 + 2 + 3 &= 180 \\
 90 + 36 + y &= 180 \\
 126 + y &= 180 \\
 y &= 180 - 126 = 54 \\
 \boxed{y = 54^\circ}
 \end{aligned}$$

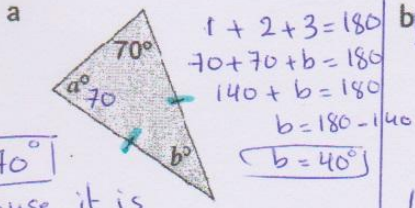


$$\begin{aligned}
 1 + 2 + 3 &= 180 \\
 50 + 90 + x &= 180 \\
 140 + x &= 180 \\
 x &= 180 - 140 \\
 \boxed{x = 40^\circ}
 \end{aligned}$$

$y = 90 - 40$ Complementary
 $\boxed{y = 50^\circ}$

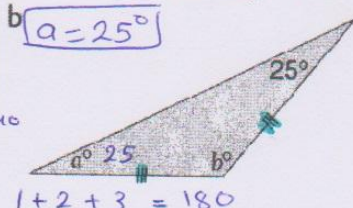
Part 2

Find the value of a , then b , in each of the following. Give reasons for your answers.

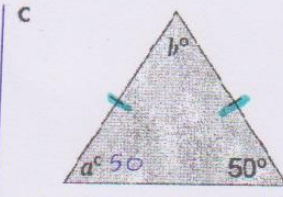


$$\begin{aligned}
 1 + 2 + 3 &= 180 \\
 70 + 70 + b &= 180 \\
 140 + b &= 180 \\
 b &= 180 - 140 \\
 \boxed{b = 40^\circ}
 \end{aligned}$$

$\boxed{a = 70^\circ}$
because it is Isosceles



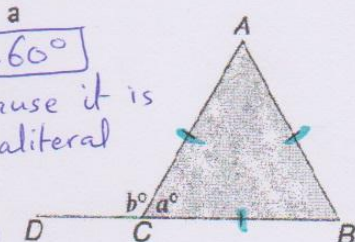
$$\begin{aligned}
 1 + 2 + 3 &= 180 \\
 25 + 25 + b &= 180 \\
 50 + b &= 180 \\
 b &= 180 - 50 \\
 \boxed{b = 130^\circ}
 \end{aligned}$$



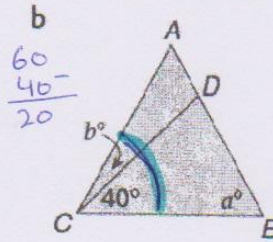
$$\begin{aligned}
 1 + 2 + 3 &= 180 \\
 50 + 50 + b &= 180 \\
 100 + b &= 180 \\
 b &= 180 - 100 \\
 \boxed{b = 80^\circ}
 \end{aligned}$$

$\boxed{a = 50^\circ}$

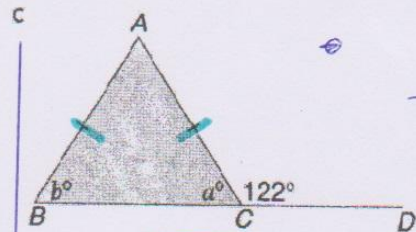
Find the value of a , then b , in each of the following. Give reasons for your answers.



$$\begin{aligned}
 \boxed{a = 60^\circ} \\
 \text{because it is equilateral} \\
 180 \\
 \underline{60} \\
 120 \\
 \Delta ABC \text{ is equilateral.} \\
 \boxed{b = 120^\circ}
 \end{aligned}$$



$$\begin{aligned}
 60 \\
 \underline{40} \\
 20 \\
 \Delta ABC \text{ is equilateral.} \\
 \boxed{a = 60} \\
 \boxed{b = 20}
 \end{aligned}$$



$$\begin{aligned}
 180 \\
 \underline{122} \\
 58 \\
 \boxed{a = 58^\circ} \text{ supplementary} \\
 \boxed{b = 58^\circ} \\
 \text{because it is Isosceles}
 \end{aligned}$$