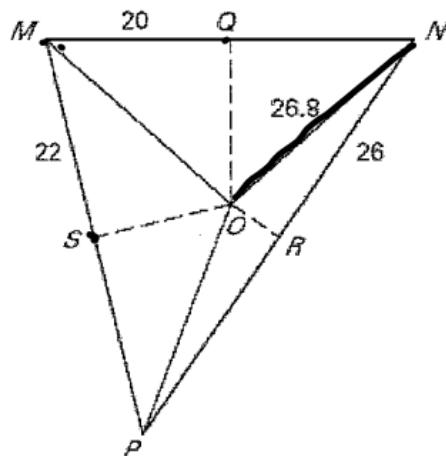
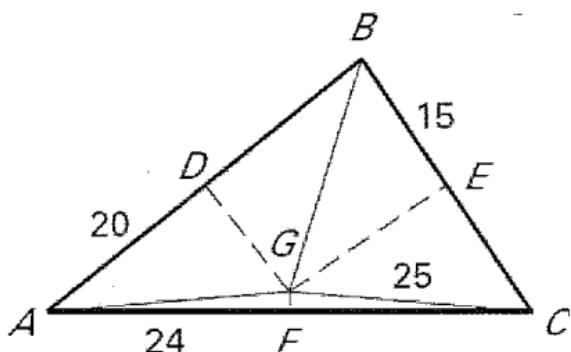


In the diagram, the perpendicular bisectors of $\triangle MNP$ meet at point O and are shown dashed. Find the indicated measure.



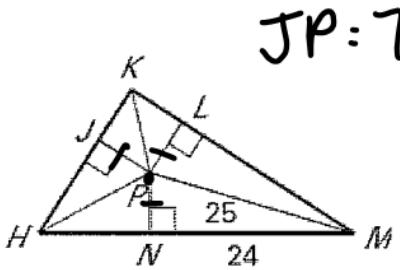
1. Find MO . 26.8
2. Find PR . 26
3. Find MN . 40
4. Find SP . 44
5. Find QN . 20
6. Find MP . 44

In the diagram, the perpendicular bisectors of $\triangle ABC$ meet at point G and are shown dashed. Find the indicated measure.



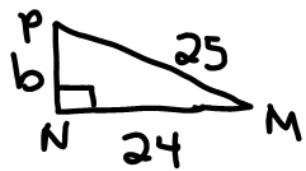
7. Find AG . 25
8. Find BD . 20
9. Find CF . 24
10. Find BG . 25
11. Find CE . 15
12. Find AC . 48

16. Point P is the incenter of $\triangle HKM$.
Find JP .

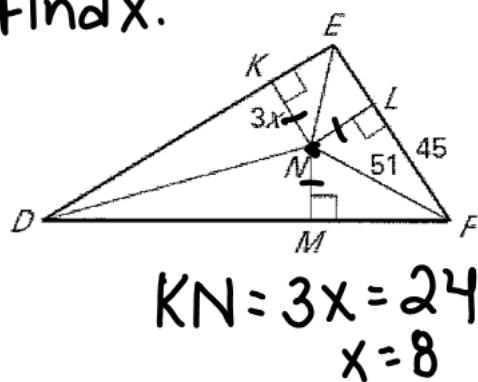


$$JP = 7$$

$$\begin{aligned} a^2 + b^2 &= c^2 \\ 24^2 + b^2 &= 25^2 \\ 576 + b^2 &= 625 \\ b^2 &= 49 \\ b &= 7 = PN \end{aligned}$$



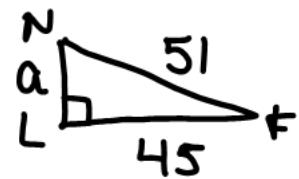
17. N is incenter of $\triangle DEF$.
Find x .



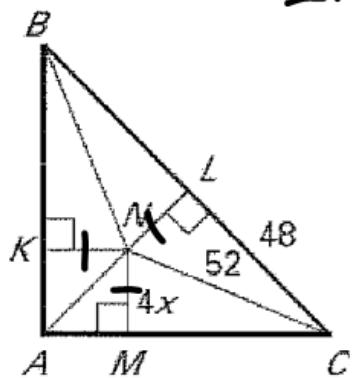
$$KN = 3x = 24$$

$$x = 8$$

$$\begin{aligned} a^2 + 45^2 &= 51^2 \\ a^2 + 2025 &= 2601 \\ a^2 &= 576 \\ a &= 24 = LN \end{aligned}$$



18. N is incenter of $\triangle ABC$. Find x .



$$MN = 4x = 20$$

$$x = 5$$

$$\begin{aligned} a^2 + 48^2 &= 52^2 \\ a^2 + 2304 &= 2704 \\ a^2 &= 400 \\ a &= 20 = LN \end{aligned}$$

