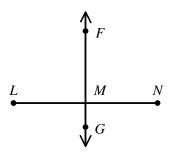
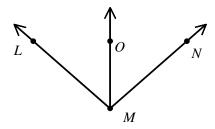
1. Given: \overrightarrow{FG} is the perpendicular bisector of \overline{LN} . Name three things that you can conclude.



2. In the figure (not drawn to scale), \overrightarrow{MO} bisects $\angle LMN$, $m\angle LMO = 16x - 45$, and $m\angle NMO = x + 105$. Solve for x and find $m\angle LMN$.



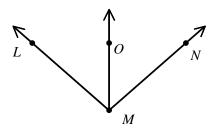
[A] 4, 19

[B] 10, 230

[C] 4, 55

[D] 10, 205

3. In the figure (not drawn to scale), \overrightarrow{MO} bisects $\angle LMN$, $m\angle LMO = 15x - 42$, and $m\angle NMO = x + 56$. Solve for x and find $m\angle LMN$.



[A] 7, 126

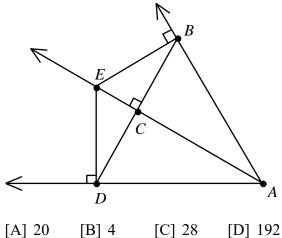
[B] 1, 49

[C] 1, 27

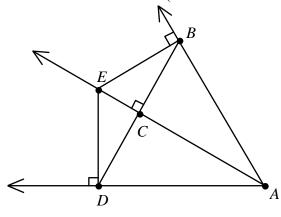
[D] 7, 147

NAME:____

4. Given: \overrightarrow{AE} bisects $\angle DAB$. Find ED if CB = 12 and CE = 16. (not drawn to scale)

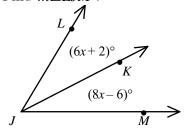


5. Given: \overrightarrow{AE} bisects $\angle DAB$. Find ED if CB = 24 and CE = 45. (not drawn to scale)



[A] 1080 [B] 51 [C] 69 [D] 21

6. In the diagram below, \overrightarrow{JK} bisects $\angle LJM$. Find $m\angle LJM$.



[A] 35

[B] 65

[C] 26

[D] 86

[E] 52

Any three of the following: $\overline{FG} \perp \overline{LN}$; $\angle FMN$, $\angle NMG$, $\angle GML$, and $\angle LMF$ are rt \angle s;

- [1] M is the midpoint of \overline{LN} ; $\overline{LM} \cong \overline{MN}$; FL = FN, GL = GN
- [2] <u>B</u>
- [3] A
- [4] A
- [5] B
- [6] E