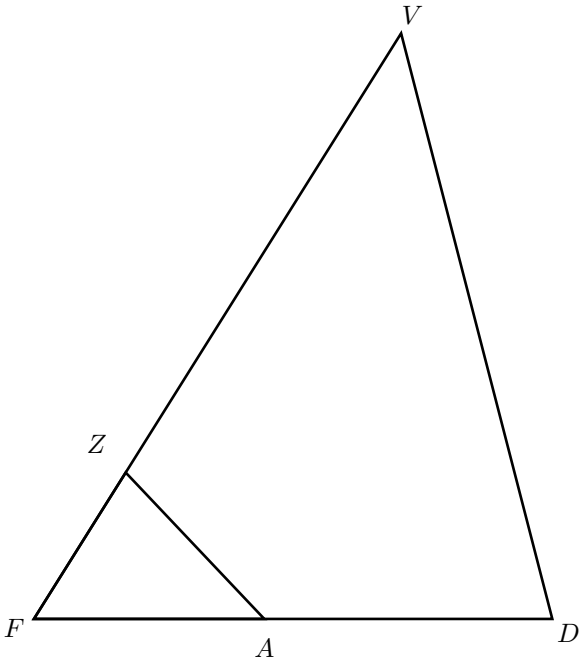
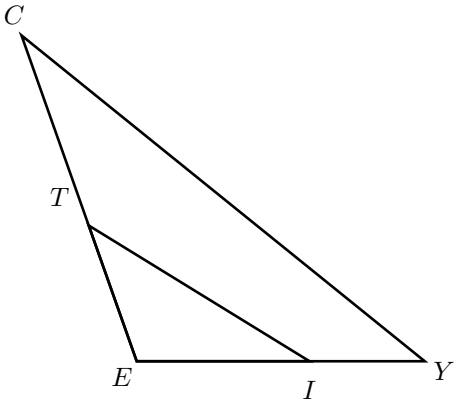
Name:_____CLASS WORK

6.7 - sideSplitter and sideSpinner - CW #:_____

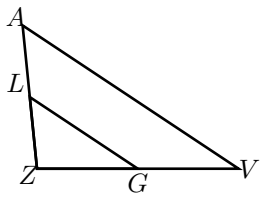
1. Given that $\angle FAZ \cong \angle V$, $FZ = 6$, $FD = 18$, and $FA = 8$, what is the length of FV?



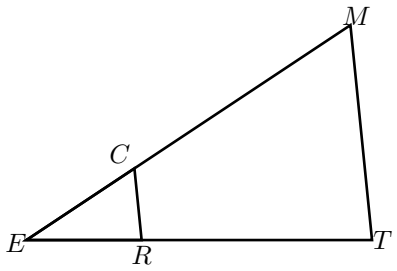

2. Given that $\angle EIT \cong \angle C$, $TI = 9$, $YC = 18$, and $ET = 5$, what is the length of EY?



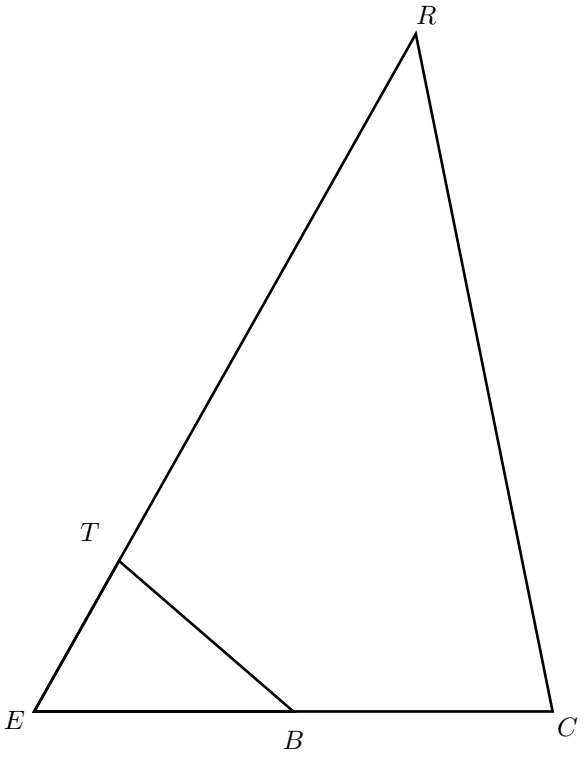
3. Given that $\overline{LG} \parallel \overline{AV}$, $ZG = 7$, $ZV = 14$, and $ZL = 5$, what is the length of ZA?



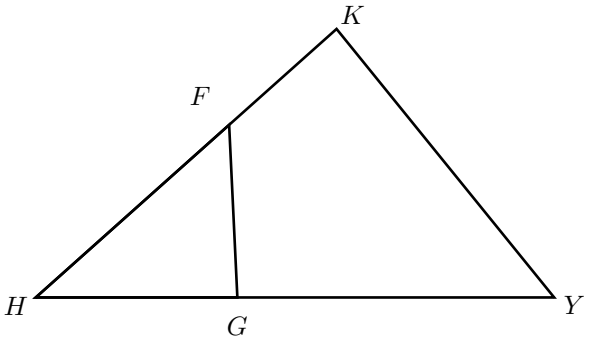

4. Given that $\overline{CR} \parallel \overline{MT}$, $ER = 8$, $ET = 24$, and $EC = 9$, what is the length of EM?



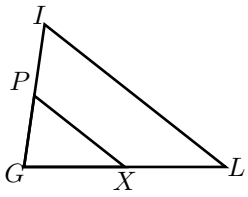
5. Given that $\angle EBT \cong \angle R$, $TR = 21$, $ET = 6$, and $EC = 18$, what is the length of EB?



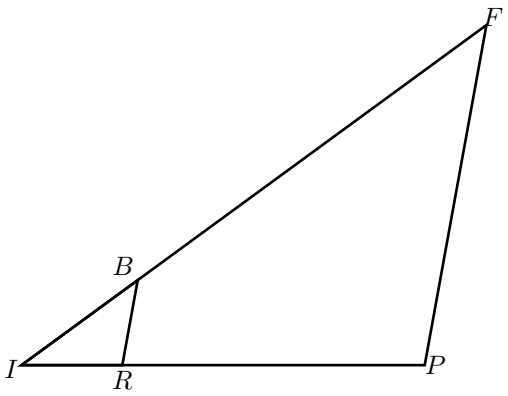

6. Given that $\angle HGF \cong \angle K$, $HK = 14$, $HF = 9$, and $HY = 18$, what is the length of GY?



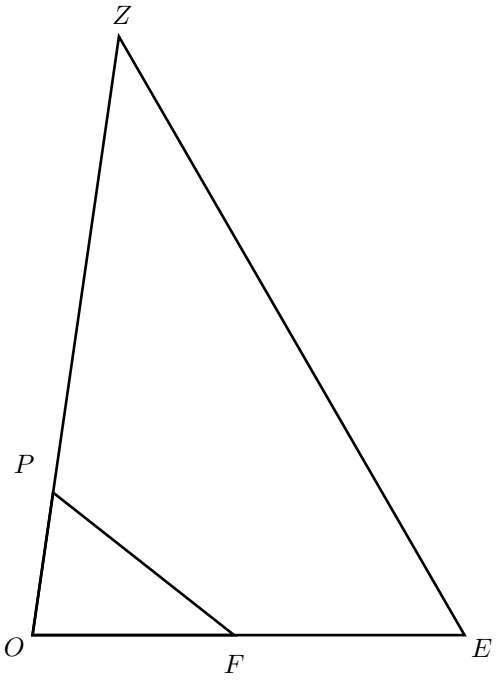
7. Given that $\overline{PX} \parallel \overline{IL}$, $PI = 5$, $GI = 10$, and $PX = 8$, what is the length of IL?



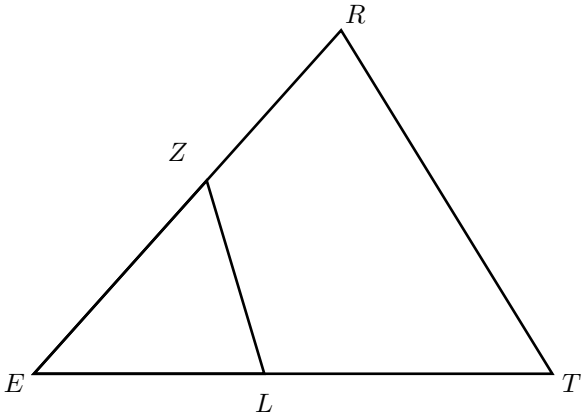

8. Given that $\overline{BR} \parallel \overline{FP}$, $BF = 30$, $IB = 10$, and $IP = 28$, what is the length of IR?



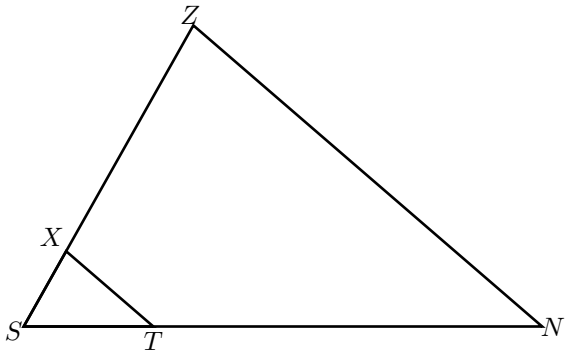
9. Given that $\angle OFP \cong \angle Z$, $OZ = 21$, $PZ = 16$, and $FE = 8$, what is the length of OE?



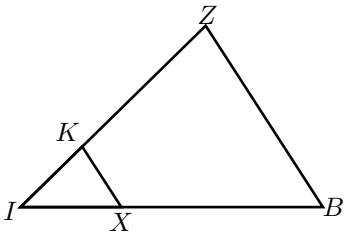

10. Given that $\angle ELZ \cong \angle R$, $EZ = 9$, $ER = 16$, and $LT = 10$, what is the length of ET?



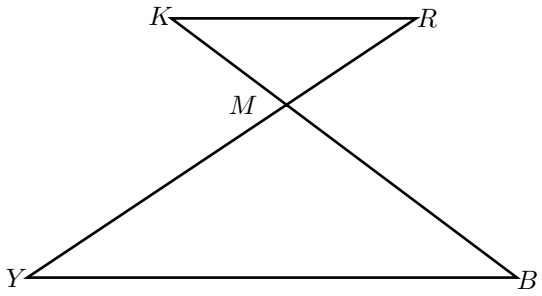
11. Given that $\overline{XT} \parallel \overline{ZN}$, $XT = 8$, $ZN = 32$, and $TN = 27$, what is the length of ST?



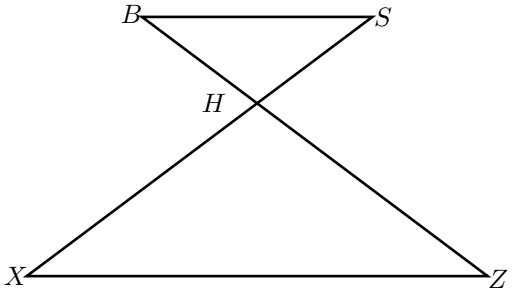

12. Given that $\overline{KX} \parallel \overline{ZB}$, $KX = 5$, $ZB = 15$, and $XB = 14$, what is the length of IB?



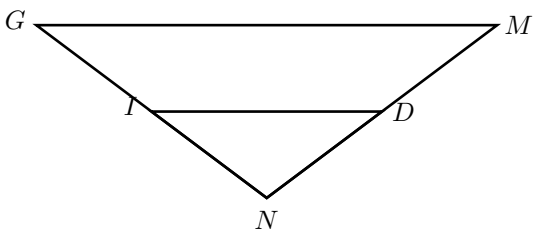
13. Given $\angle MKR \cong \angle B$, prove the two triangles are similar.



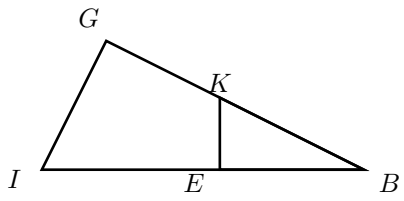

14. Given that $\overline{BS} \parallel \overline{ZX}$, prove the two triangles are similar.




15. Given that $\overline{ID} \parallel \overline{GM}$, prove the two triangles are similar.



16. Given that $\angle EKB \cong \angle I$, prove that the two triangles are similar.



Name:_____CLASS WORK

6.7 - sideSplitter and sideSpinner - CWAnswers #:_____

1. $FV = 24$
2. $EY = 10$
3. $ZA = 10$
4. $EM = 27$
5. $EB = 9$
6. $GY = 11$
7. $IL = 16$
8. $IR = 7$
9. $OE = 15$
10. $ET = 18$
11. $ST = 9$
12. $IB = 21$
13. $\triangle KMR \sim \triangle BXY$
14. $\triangle BHS \sim \triangle ZCX$
15. $\triangle IND \sim \triangle GCM$
16. $\triangle KEB \sim \triangle IGM$