

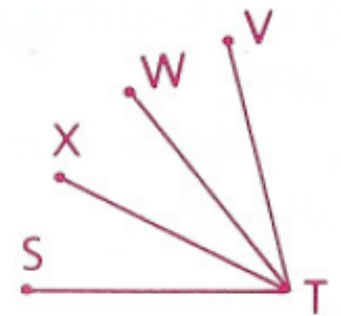
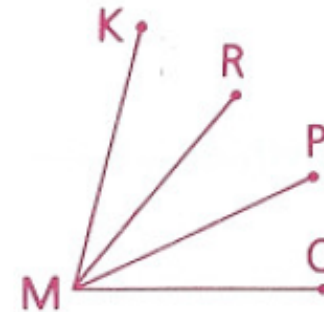
Homework

p. 91-93: 1, 2, 3, 12, 14

Review how to use the multiplication and division properties in proofs as you do the homework

- 1** Given: $\angle KMR \cong \angle VTW$;
 \overrightarrow{MR} and \overrightarrow{MP} trisect $\angle KMO$.
 \overrightarrow{TX} and \overrightarrow{TW} trisect $\angle STV$.

Prove: $\angle KMO \cong \angle STV$

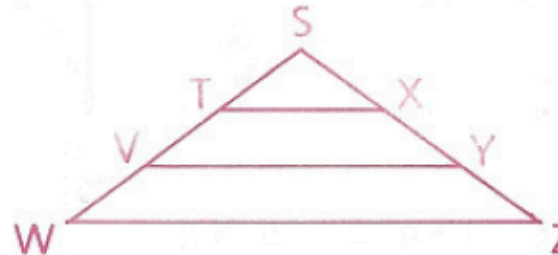


- 2** Use the given information to find the value of x .

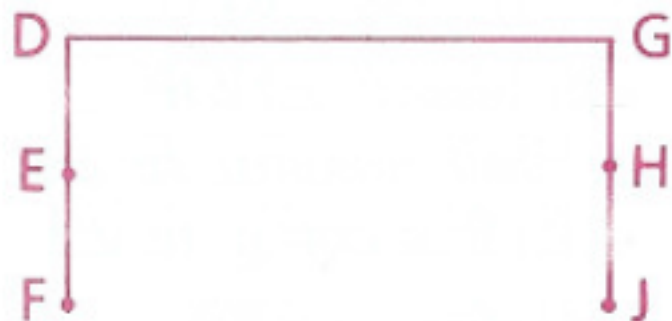
- a** $\angle HGJ \cong \angle ONP$;
 \overrightarrow{GJ} and \overrightarrow{NP} are \angle bisectors.
 $\angle HGK = 50^\circ$,
 $\angle ONR = (2x + 10)^\circ$



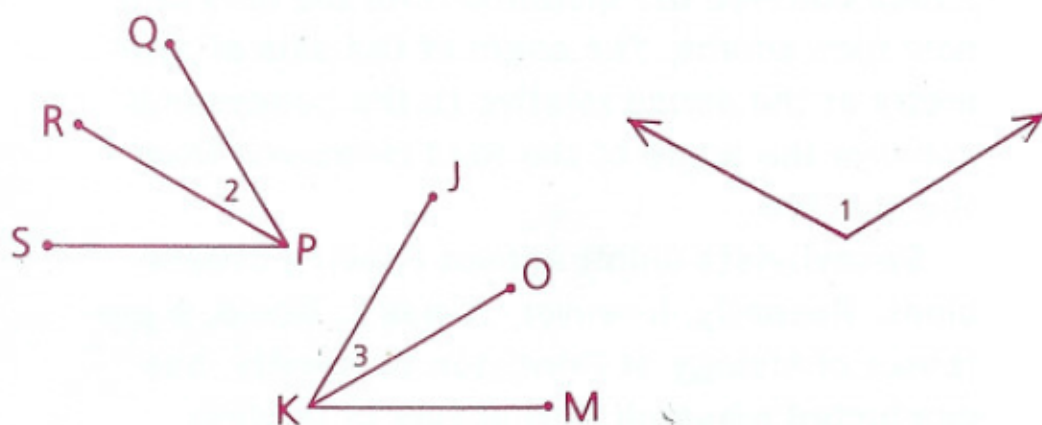
- b** $\overline{SW} \cong \overline{SZ}$;
 \overleftrightarrow{TX} and \overleftrightarrow{VY} trisect \overline{SW} and \overline{SZ} .
 $ST = 12$,
 $YZ = x - 4$



- 3** Given: $\overline{DF} \cong \overline{GJ}$;
 E is the midpoint of \overline{DF} .
 H is the midpoint of \overline{GJ} .
 Prove: $\overline{DE} \cong \overline{GH}$



- 12** Given: \overrightarrow{PR} bisects $\angle QPS$.
 \overrightarrow{KO} bisects $\angle JKM$.
 $\angle 1$ is supp. to $\angle JKM$.
 $\angle 1$ is supp. to $\angle QPS$.
 Conclusion: $\angle 2 \cong \angle 3$



- 14** If four times the supplement of an angle is added to eight times the angle's complement, the sum is equivalent to three straight angles. Find the measure of the angle that is supplementary to the complement.