Geometry Survey

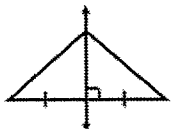
Worksheet

Name: KEY

Period: _____

Decide whether each diagram shows a ***perpendicular bisector*** or an ***angle bisector***.

1.

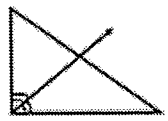


⊥ bisector

2.

∠ bisector

3.



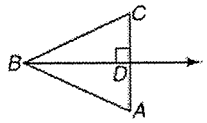
∠ bisector

4.

⊥ bisector

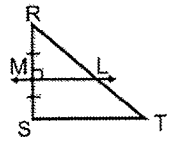
Name the ***perpendicular bisector*** in each figure.

5.



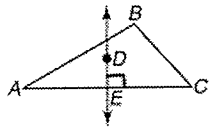
$\overleftrightarrow{BD}$

6.



$\overleftrightarrow{ML}$

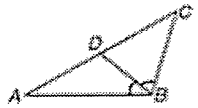
7.



$\overleftrightarrow{DE}$

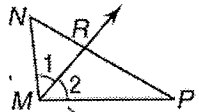
Name the ***angle bisector*** in each figure.

8.



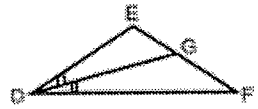
$\overline{DB}$

9.



$\overrightarrow{MR}$

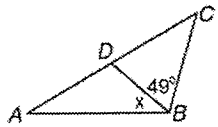
10.



$\overline{DG}$

Find the value of *x* in each figure.

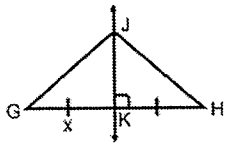
11.



DB is an angle bisector.

$m\angle X = 49$

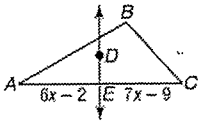
12.



JK is a perpendicular bisector and GH = 12.

$X = 6$

13.

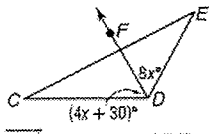


$\overleftrightarrow{DE}$ is the perpendicular bisector of $\overline{AC}$.

$6x - 2 = 7x - 9$

$7 = x$

14.



$\overline{DF}$ bisects $\angle CDE$.

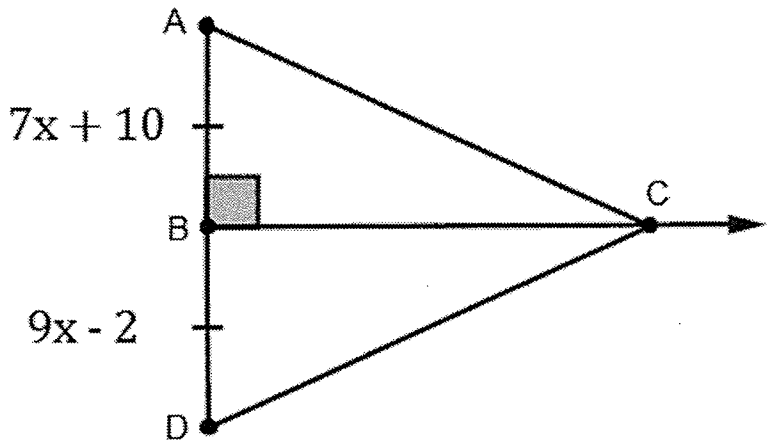
$4x + 30 = 8x$

$30 = 4x$

$\frac{15}{2} = x$

15.

BC is the perpendicular bisector to ~~AC~~ AD. Find x, AB, and BD.



$7x+10=9x-2$

$12=2x$

$6=x$

$\overline{AB}=52$

$\overline{BD}=52$