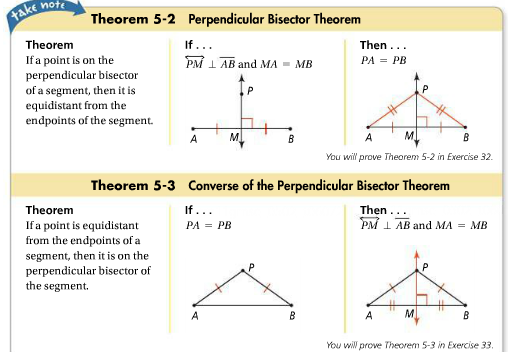
Geometry 22 **5.2 Perpendicular and Angle Bisectors** Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_per\_\_\_\_

*Objective: The students will be able to define and use the properties of perpendicular bisectors and angle bisectors.*

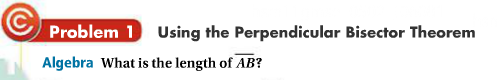
**Perpendicular Bisector:**

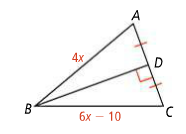
 Draw the perpendicular bisector of the segment;

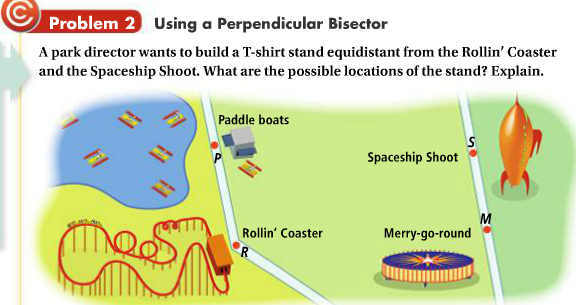
 (now draw a bisector that is NOT a bisector!... )

**Equidistant**: (defn)

The same or equal distance







Draw the line on which the stand should be built.

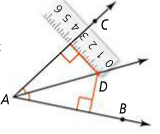
**Distance from a point to a line**…

C:\Users\Meyers Family\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\QPB76N15\MC900389392[1].wmf How far is this house from the street? Draw the segment you would measure to determine the distance.

C:\Users\Meyers Family\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\DCOJO2JC\MC900364164[1].wmfC:\Users\Meyers Family\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\DCOJO2JC\MC900364164[1].wmf

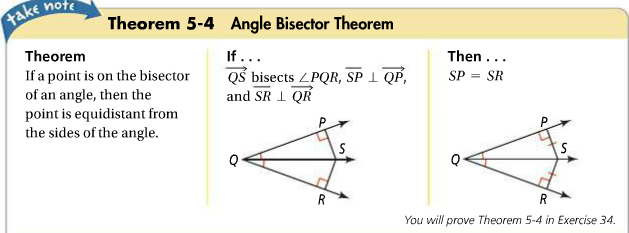
So, the distance from a point to a line is defined as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

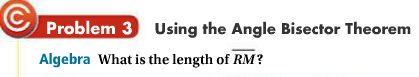
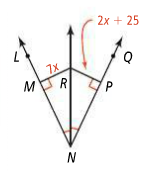
In a geometric figure like the one below, to measure the distance from point D to ray AC or ray AB, you would need to measure the length of the segment drawn from point D perpendicular to the ray as shown…

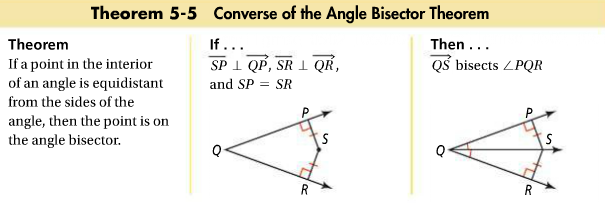


E

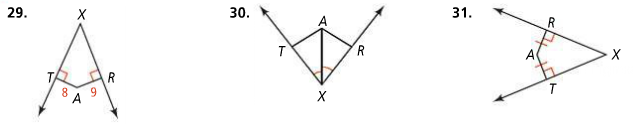
NOTE\*\* Since ray AD is the angle bisector of <CAB, then these 2 distances are the same. DE = DF (see theorem below)

 F

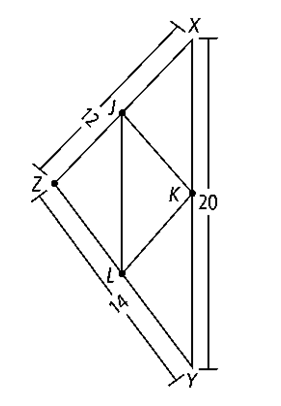


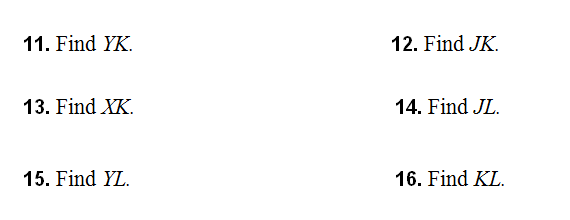


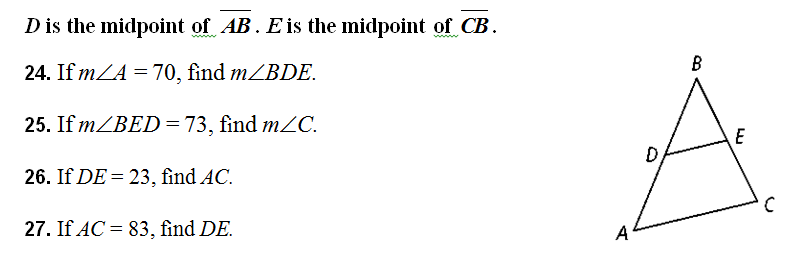


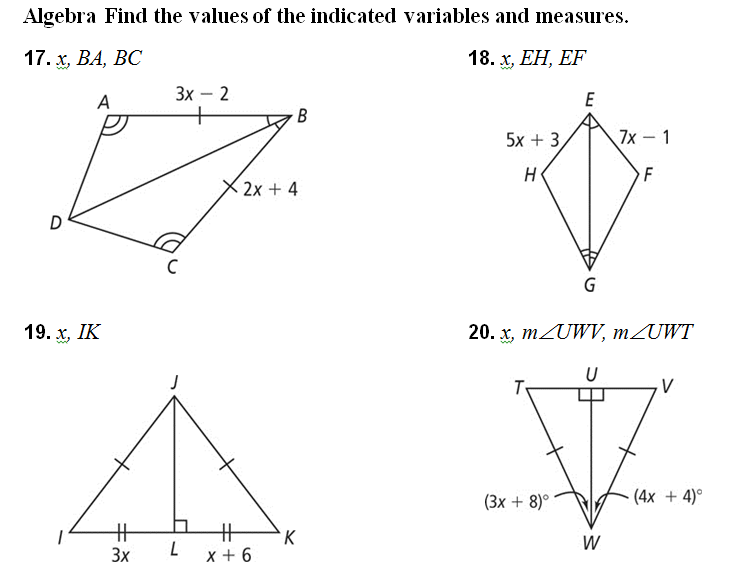


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**5.1 practice and review**





**5.2 practice**