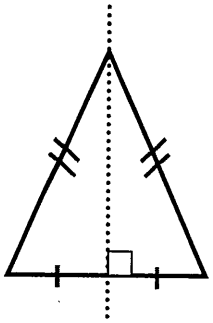
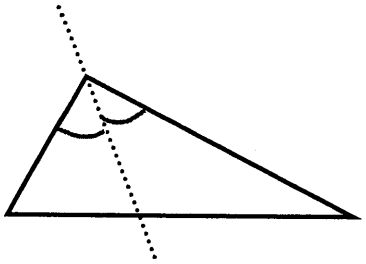
Name _____ Date _____ Period _____

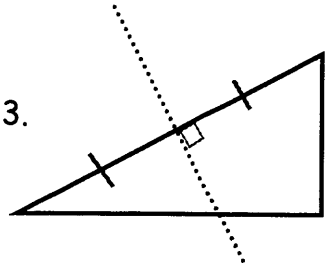
Geometry
Special Segments & Points of Concurrency
Classwork/Practice

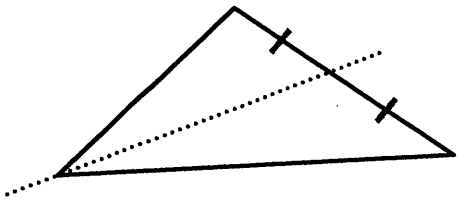
Given the following pictures and markings, identify if the dotted line is (a) an angle bisector, (b) a perpendicular bisector, (c) an altitude, or (d) a median. List all that apply.

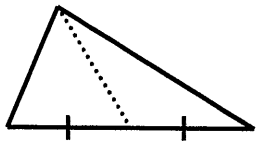
1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____

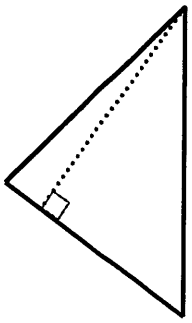
1.


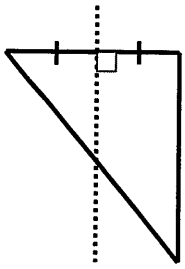
2.


3.


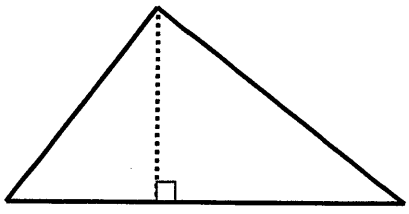
4.


5.


6.


7.


8.


9.


10. Fill in the blanks:

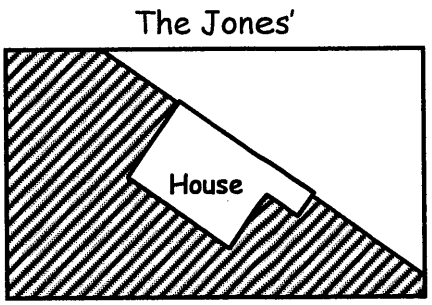
a) The perpendicular bisectors meet at the _____.

b) The altitudes meet at the _____.

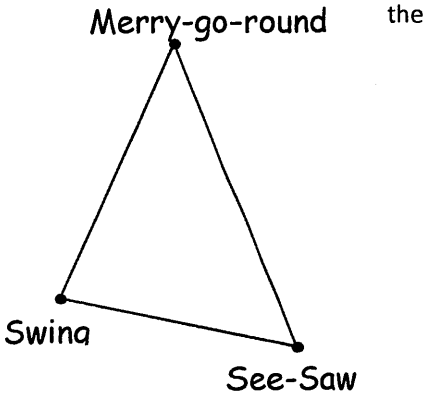
c) The medians meet at the _____.

d) The angle bisectors meet at the _____.

11. This rectangle represents the Jones' lot. The triangular region represents their backyard. The Jones' want to build the largest possible circular pool in the back yard. How would you determine the location of the pool?



12. The Smith Construction Company has been hired to install a new water fountain at Winstonian Park. They would like to find the best location for the fountain so that the walking distance from each of the three main pieces of playground equipment is the same. Locate the point and explain how you determined this.



13. You are a sculptor and have just completed a large metal mobile. You want to hang this mobile, made of a flat triangular metal plate, in the State Capitol. This triangular piece will hang so that it will be suspended with the triangular surface parallel to the ground. Locate the point and explain how you accomplished this.