## F. 3 Mathematics: Lines in a Triangle

Name: $\qquad$ ( )
F. 3 $\qquad$


1. Use the tool $\square$ and click on the vertices to construct the median at $A, B$ and $C$. Drag $A, B$ and $C$ and observe the geometric properties of the medians. Check the boxes of the table below.
2. Use the tool $\square$ and click on the vertices to construct the altitudes at $A, B$ and $C$. $\operatorname{Drag} A, B$ and $C$ and observe the geometric properties of the altitudes. Check the boxes of the table below.
3. Use the tool $\square$ and click on the vertices to construct the angle bisectors at $A, B$ and $C$. $\operatorname{Drag} A, B$ and $C$ and observe the geometric properties of the medians. Check the boxes of the table below.
4. Use the tool $\square$ and click on the vertices to construct the perpendicular bisectors at $A, B$ and $C$. $\operatorname{Drag} A, B$ and $C$ and observe the geometric properties of the medians. Check the boxes of the table below.

| Geometric Properties | Medians | Altitudes | Angle <br> Bisectors | Perpendicular <br> Bisectors |
| :---: | :--- | :--- | :--- | :--- |
| Passing through the <br> vertices of the triangle |  |  |  |  |
| Bisect the sides of <br> the triangle |  |  |  |  |
| Bisect the angles of <br> the triangle |  |  |  |  |
| Perpendicular to the <br> sides of the triangle |  |  |  |  |
| Three lines concurrent |  |  |  |  |

## Exercises


$B D$ is a $\qquad$ of the triangle.
3.

$A R$ is a $\qquad$ of the
triangle.

$C D$ is a $\qquad$ of the
triangle.
7.

$Q R$ is a $\qquad$ of the
triangle.
$P S$ is a $\qquad$ of the triangle.

Try also the interactive exercises of the link.
https://goo.gl/Mexb62


