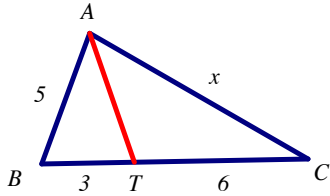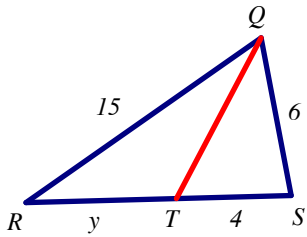## Ray bisects an angle

If a ray bisects an angle of a triangle, it divides the opposite side into segments whose lengths are proportional to the lengths of the other two sides.
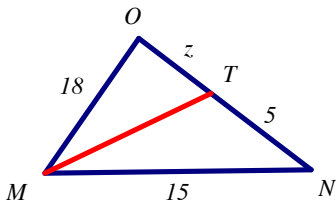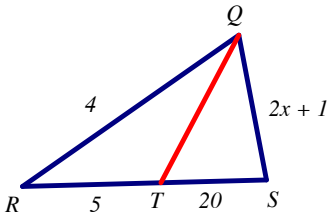
1. $\overline{AT}$ bisects $\angle A$, find AC.

2. $\overline{QT}$ bisects $\angle Q$, find RT

3. $\overline{MT}$ bisects $\angle M$, find TO

4. $\overline{QT}$ bisects $\angle Q$, find the value of x and QS.

5. $\overline{AT}$ bisects $\angle A$, find the value of x, AB and AC.