**Accelerated Angle Relationships Homework #1**

**Find the value of the variable and find the m<PQR. Justify steps!**

1. 2. 3.

$\vec{BA} and \vec{BC} are opposite rays.$$\vec{BF} $ **bisects <CBE and** $\vec{BD} $**bisects <ABE. Justify your steps.**

4. If $m<EBF=8x^{2}-9x-5 $and $m<CBF=4-3x$, find the possible value(s), if any, of the $m<EBC$. You must check your work for credit.



$\vec{BA} and \vec{BC} are opposite rays.$$\vec{BF} $ **bisects <CBE and** $\vec{BD} $**bisects <ABE. Justify your steps.**

5. If $m<2=10x^{2}+5x+7$and $m<1=3x^{2}-17x+4$, find the possible value(s), if any, of $m<ABE$. You must check your work.



6.



7.



**Decide whether the statement is *true or false*. If the statement if false, reword the statement so it is true.**

8. Two angles are complementary if the sum of their measures is 180°

9. Two angles are supplementary if the sum of their measures is 180°

10. Two angles are adjacent angles if they share a common vertex.

**Determine whether the angles are complementary, supplementary or neither.**



11. 12. 13.

**Find the measure of the complement of the given angle.**



14. 15. 16.

**Find the measure of the supplement of the given angle.**



17. 18. 19.

**Find the measure of EACH numbered angle. Justify steps!**



20. 21. 22.



23. 24. 25.