**Angle Relationships Intervention-ACC 2018**

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Hr. \_\_\_\_\_\_\_\_\_

**In class Questions:**

**1.** Two angles are complementary. The measure of one angle is 21 more than twice the measure of the other angle. Set up TWO equations to represent this information and then find the measures of the angles using correct units on your final answers.

**#s 2-5**

**a.) Draw the picture if one is not given to you.**

**b.) Set up your geometry first and justify you set up.**

**Note\* You may not change or rename any angles**

**2.** $\vec{FC}⊥\vec{FB}. $If point E lies in the interior of <CFB, find x such that $<CFE=8x-2 and <EFB=2x+13$.

(You need to have two geometry and two justifications).

**3.** If *<SXT=3a – 4, <RXS=2a + 5, <RXT=111°.* Find *a* and the measure of <RXS.

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For # 4 & 5

**** $\vec{HL}$ **is an angle bisector of <KHI,** $\vec{HJ}$ **bisects <KHG and** $\vec{HJ}⊥\vec{HL}$**.**

You may not change or rename any angles

**4.** $<KHG=70°$, and $<1=3d + 2$. Find d.

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**5.** Find m <KHL if $<IHL=2x^{2}-17x$ and $<KHL=6x^{2}+15$.

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



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

8. 7. If $∠1=x^{2}+2x $and $∠2=4x+140$, find the possible value(s) of x, $∠3$, and $∠4. $Note: This figure is not drawn to scale. You must check your work.



**Angle Relationships Intervention-ACC WARM-UP**

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Hr. \_\_\_\_\_\_\_\_\_

1. Solve through factoring$0=4x^{2}-4x-35$.

2. Solve through factoring$ 0=8x^{2}-10x+3$.