2.4 HW Making Assumptions & Basic Geometry Terms Geometry

**1) Directions: Use the given figure to place each statement under the correct category.**



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| $\overleftrightarrow{ACD} and \overleftrightarrow{BCE }are straight lines.$$∠B≅∠E$**.**$∠BAC$ **is a right angle.** $∠CDE$ **is an obtuse angle.**$\overbar{CD}≅\overbar{DE}$ **E is to the right of A.**$∠$**BCE is a straight angle.** $\overbar{BC}$ **is longer than** $\overbar{CE}$**.****C, D, & E are noncollinear. C is between B and E.** |

 **DO ASSUME DO NOT ASSUME\_\_\_\_\_\_\_**

**2) In the following figure, what assumptions can we make?**

1.  C lies on $\overbar{BD}$.
2. $∠$A is a right angle.
3. $\overbar{AB}≅\overbar{FD}$
4. D lies on *m*.
5. B, C, & G are collinear.
6. $\overleftrightarrow{AB}$ is parallel to $\overleftrightarrow{FD}$.
7. C is the midpoint of $\overbar{BD}$.
8. ∆ABD is a triangle.
9. B lies on $\vec{GC}$.

**Directions: Explain what the symbol or phrase means.**

3) $\overbar{AB}∥\overbar{DE}$

4) JK = RW

5) A, B, & C are collinear

6) $∠J$ and $∠T$ are supplementary

7) m$∠ABC$ = 30ᴼ

8) $∠W ≅ ∠H$

9) $m∠W= m∠H$

10) $∠Q$ and $∠F$ are complementary

11) $\overleftrightarrow{PJ}⊥\overbar{HI}$

12) $\overbar{RW}$ bisects $∠$Y