**General Rules for Dimensioning**

1. Dimensions should **NOT** be **duplicated**, or the same information be given in two different ways.
2. **No unnecessary** dimensions should be used - only those needed to produce or inspect the part.
3. Dimensions should be placed at **finished surfaces** or important center lines.
4. Dimensions should be placed so that it is not necessary for the observer to calculate, scale, or **assume any measurement**.
5. Dimensions should be attached to the view that best shows the **shape** of the **feature** to be dimensioned.
6. **Avoid dimensioning to hidden lines** wherever possible.
7. Dimensions **should not be placed on the object** unless that is the **only clear option**.
8. **Overall** dimensions should be placed the **greatest distance away** from the object so that intermediate dimension can nest closer to the object to avoid crossing extension lines.
9. Avoid crossing dimension lines.
10. Never cross extension lines.
11. A center line may be extended and used as an extension line.
12. Leaders should slope at a 30, 45 or 60 degree angle.
13. Dimension numbers should be centered between arrowheads, except when using stacked dimensions then the numbers should be staggered.
14. In general, a circle is dimensioned by its diameter, an arc by its radius.
15. Holes should be located by their center lines.
16. Holes should be located in the view that shows the feature as a circle.
17. Always dimension the actual size of the object - not the scaled size.



 Place all required dimensions baced on the rules

Complete dimensions based completed sample provided by the teacher.