

Chapter 6 Worksheet – Part 1

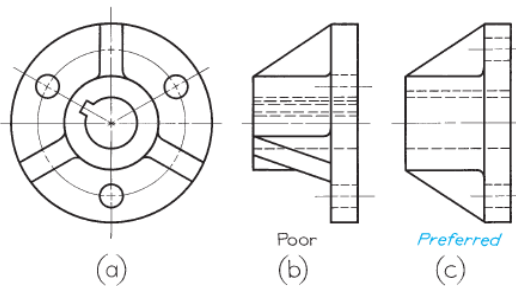
Glass Box, Partial Views, Revolutions Conventions, Removed Views, Surfaces, Edges & Corners

1. If you put an object in a “glass box”, the planes of projection are _____ to the principal faces of the object.
2. Why is it so important for the six views to properly align, in terms of dimensions?

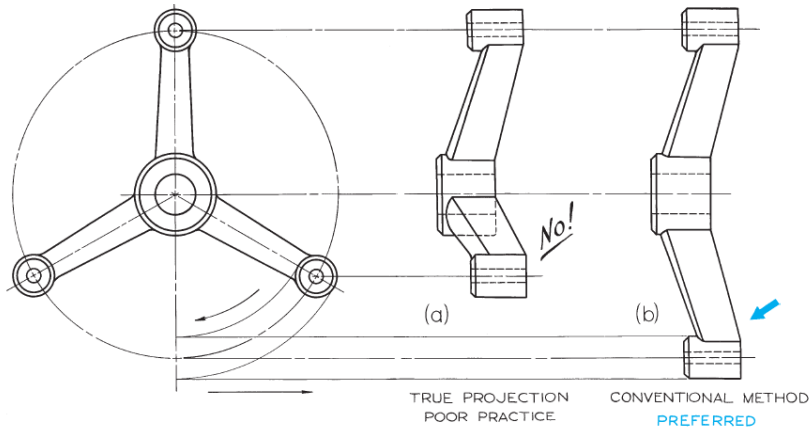
3. Define, “**Partial View**”. _____

4. If an object is symmetrical, a **partial view** or **half-view** of the object may be drawn. Sketch an example of this below.
5. A break line maybe used to limit the partial view. Why is a break line used and not a visible line?

6. Regular multi-view projections are sometimes awkward, confusing, or actually misleading. For example, the figure below shows an object that has three triangular ribs, three holes, and a key-way. Why is **regular projection**, (*the side view (b)*) not recommended? Explain specifically what is wrong with how the ribs, holes, and keyway are shown in view (b)



7. In the case of the figure above, figure (c) is the preferred way of drawing the side view. What is this method called? _____
8. Why is the method you stated in #7, the preferred way of drawing such a view? _____
9. When using the **conventional method**, each of the features of the object are revolved in the front view to lie along _____, from where it is projected to the correct side view.
10. In the figure on the back, part (a) the **regular projection** produces a confusing _____ of the inclined arm. To preserve the appearance of symmetry about a common center, the lower arm is _____ to line up vertically in the front view so that is projects _____ in the side view.



11. Define what a **removed view** is. _____

12. True or False. A **removed view** can be placed on a sheet so that it is not in direct projection with any other view.

13. Why may you need to show a **removed view**? _____

14. For a **removed view**, what is used to indicate the part being viewed? _____

15. How do you title a **removed view**? _____

16. To analyze and synthesize multi-view projections, the component elements that make up most solids must be considered. A **surface plane** may be bound by _____

17. In your own words, explain what "**foreshortened**" means relating to drafted drawings? _____

18. (1) If a **plane surface** is perpendicular to a plane of projection, it will appear as a line or **edge view (EV)**. (2) If it is parallel, it appears as a **true size (TS) surface**. (3) If it is situated at an angle, it appears as a **foreshortened (FS) surface**. Sketch three figures below describing these three concepts.

19. The intersection of two plane surfaces produces a _____.

20. Sketch a figure below describing the following statement. "*If an edge is perpendicular to a plane of projection, it appears as a point.*"