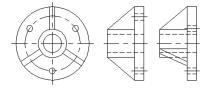
Last Name:	
First Name:	
Class:	
Grade:	Converted to Final Grade:

Beginning Engineering Graphics Instructor: Edward N. Locke

Quiz 4: Orthographic Working Drawings (Three-views, Section, Auxiliary View and Revolution)

(1) Circle all correct statements on auxiliary views and revolution:

- 1. In an auxiliary view, the shape and sizes of the "non-slanted" parts of the object will be distorted.
- 2. It is preferable to draw full auxiliary view rather than partial or half auxiliary views in most cases.
- 3. Regular views and auxiliary views can switch from one to the other through revolutions.
- 4. In revolutions about an axis that is perpendicular to the front plane, the axis appears as a point, and the true shape and sizes of the front view will not change no matter how many revolutions take place.
- (2) You have an object with a slanted surface, and on the slanted surface, there is a cylindrical shape with complicated interiors. In order to clearly describe this object, you should draw
- 1. the top and front views, plus an auxiliary view.
- 2. three regular views plus an auxiliary sectional view.
- (3) You are designing a tool that will be made by bending a metal piece. In order to show how the piece look before and after the machining process, you should make
- 1. two drawings, one showing the metal piece before bending, and the other showing the completed tool.
- 2. one drawing showing the completed tool with solid object lines and its shape before bending with hidden lines.
- 3. one drawing showing the completed tool with solid object lines and its shape before bending with phantom lines, as well as the dimensions for the work piece before bending and for the completed tool
- 4. one drawing showing the completed tool with solid object lines and its shape before bending with hidden lines, and the dimensions for the completed tool.
- (4) Circle the letter representing the correct drawing.



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- (5) Circle all correct statement about three-view drawings:
- 1. Three-view drawings show the objects in a three-dimensional, realistic and pictorial way;
- 2. Three-view drawing are used for most rectangular blocks, but sometimes auxiliary views showing the true shape of slanted surface or sectional views showing the inside details of an object are needed to completely describe the object.