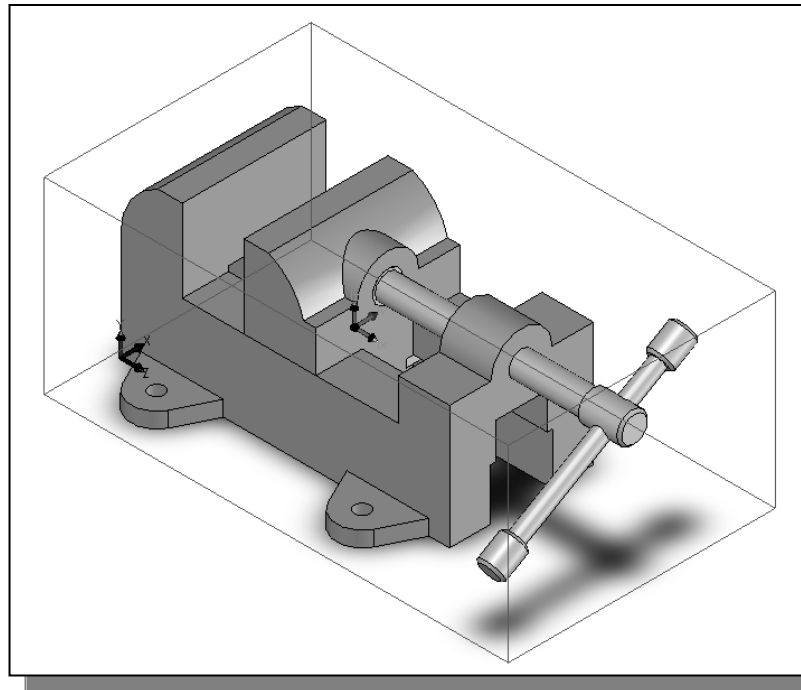
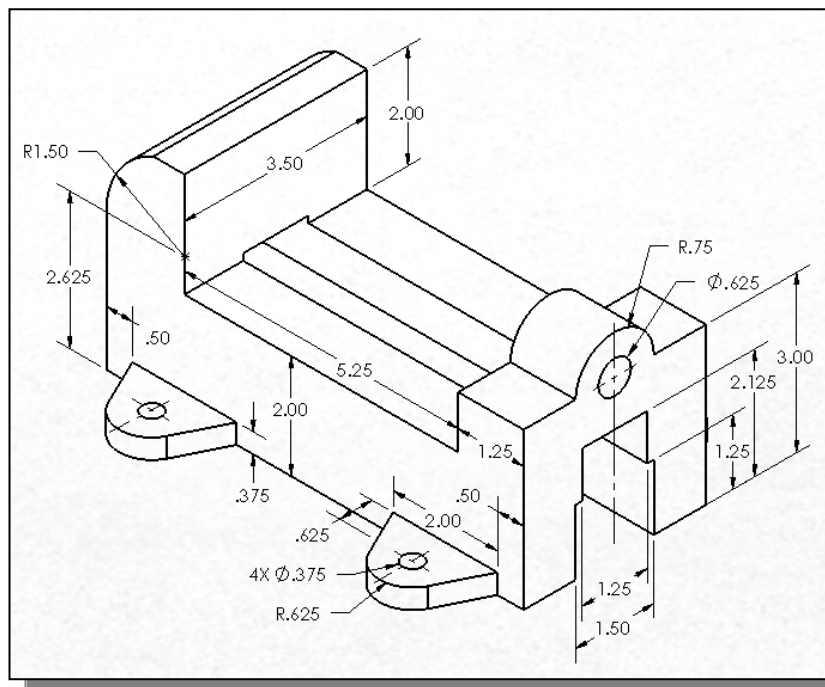


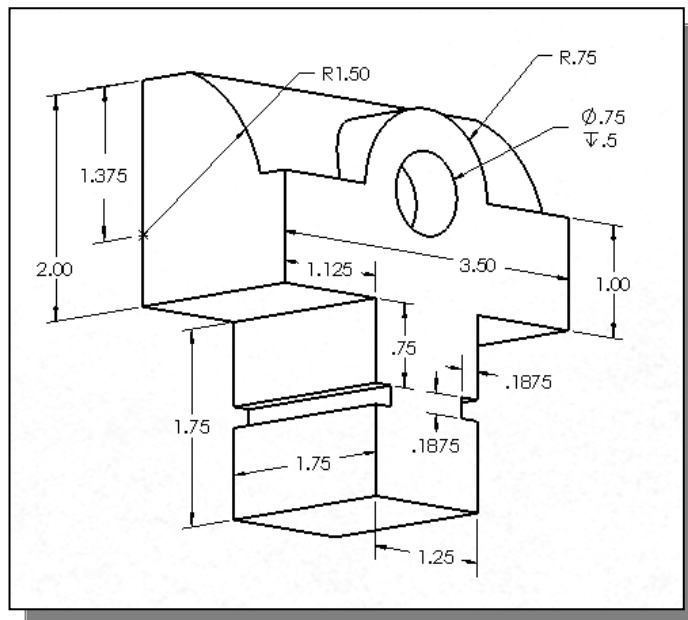
4. **Vise Assembly** (Create a set of detail and assembly drawings. All dimensions are in inches.)



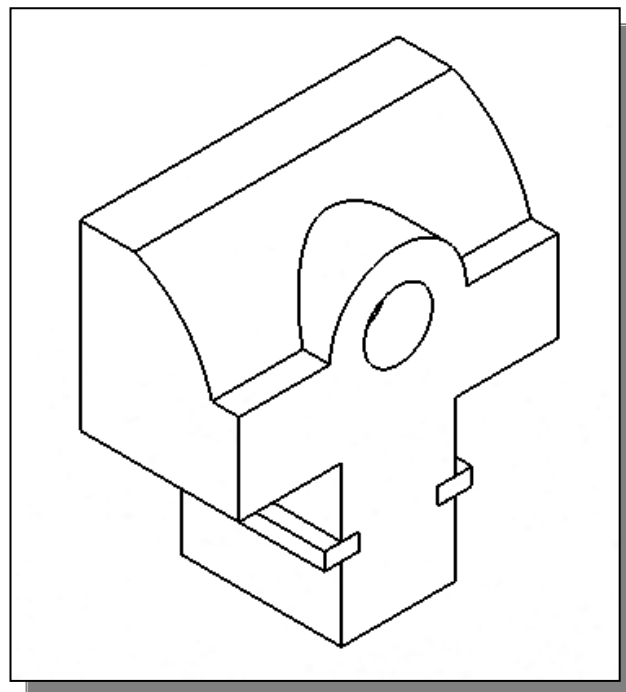
- (a) **Base:** The 1.5 inch wide and 1.25 inch wide slots are cut through the entire base.  
Material: Gray Cast Iron.



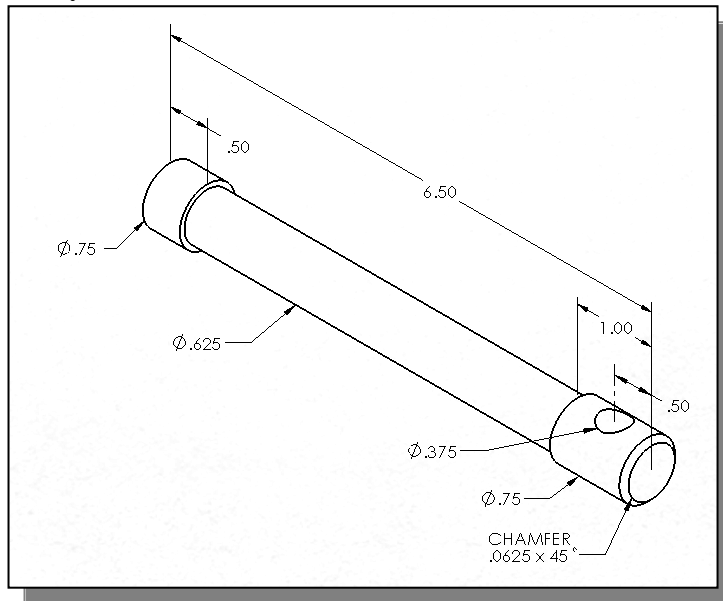
- (b) **Jaw:** The shoulder of the jaw rests on the flat surface of the base and the jaw opening is set to 1.5 inches. Material: Gray Cast Iron.



- (c) **Key:** 0.1875 inch H x 0.375 inch W x 1.75 inch L. The keys fit into the slots on the jaw with the edge faces flush as shown in the sub-assembly to the right. Material: Alloy Steel.



- (d) **Screw:** There is one chamfered edge (0.0625 inch x 45°). The flat  $\varnothing$  0.75" edge of the screw is flush with the corresponding recessed  $\varnothing$  0.75 face on the jaw.  
Material: Alloy Steel.



- (e) **Handle Rod:**  $\varnothing$  0.375" x 5.0" L. The handle rod passes through the hole in the screw and is rotated to an angle of 30° with the horizontal as shown in the assembly view. The flat  $\varnothing$  0.375" edges of the handle rod are flush with the corresponding recessed  $\varnothing$  0.735" faces on the handle knobs. Material: Alloy Steel.
- (f) **Handle Knob:** There are two chamfered edges (0.0625 inch x 45°). The handle knobs are attached to each end of the handle rod. The resulting overall length of the handle with knobs is 5.50". The handle is aligned with the screw so that the outer edge of the upper knob is 2.0" from the central axis of the screw. Material: Alloy Steel.

