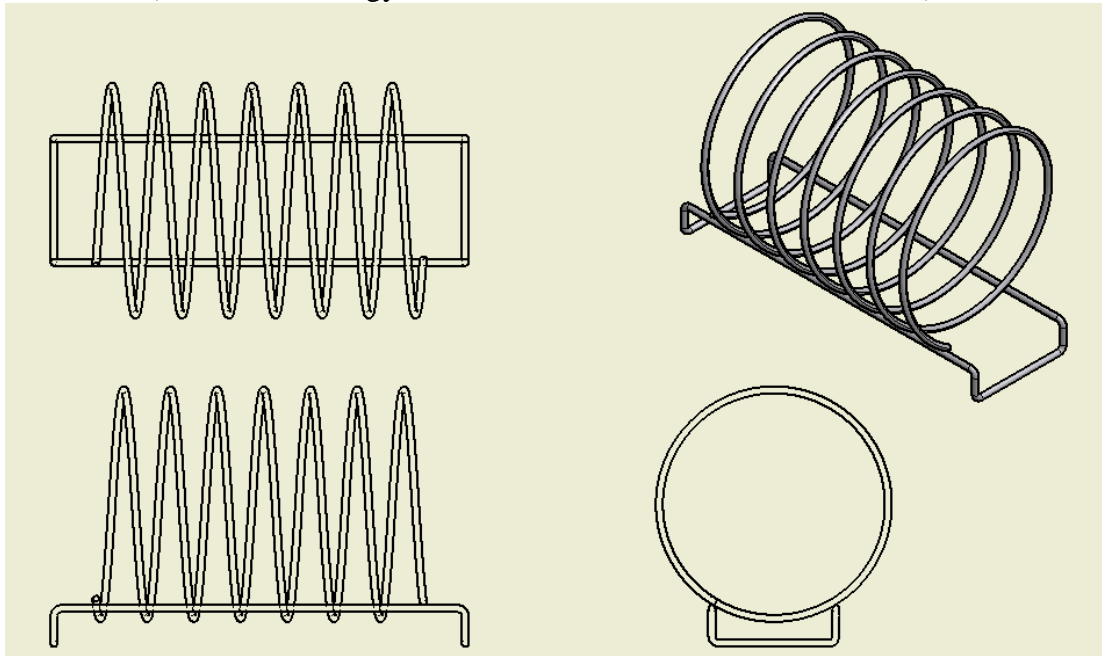


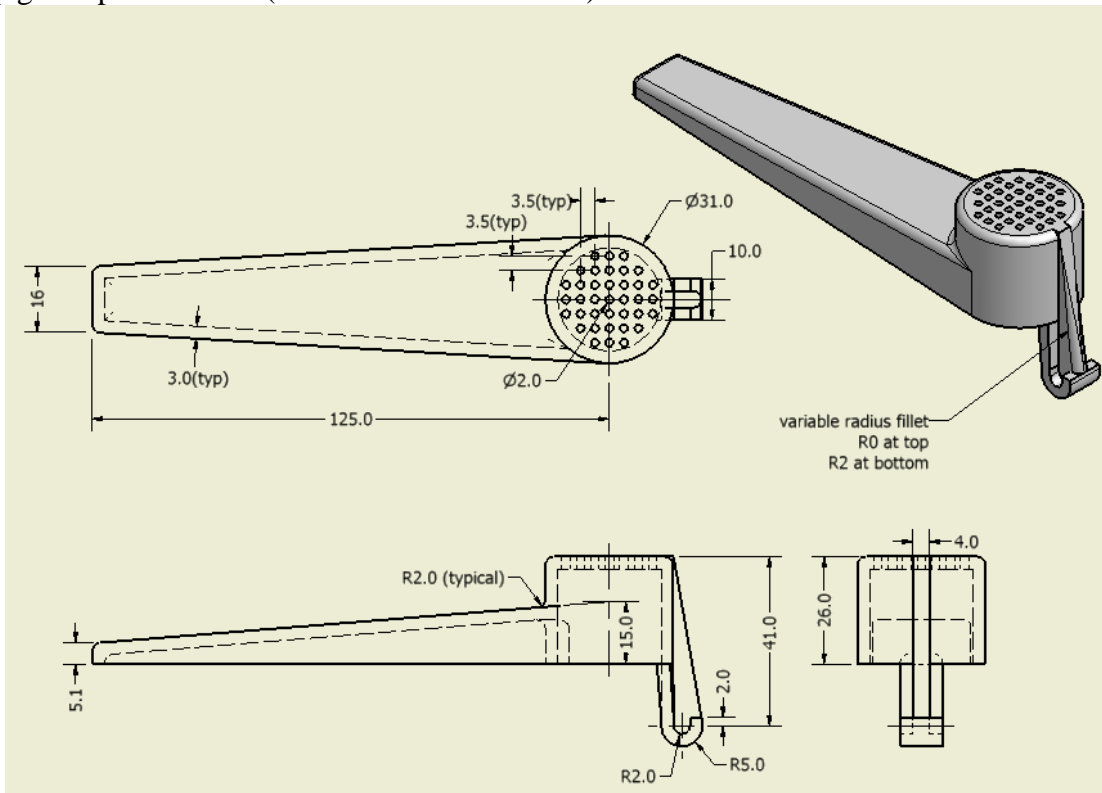
Modeling Assignment 4

Use Inventor to model the following parts using millimeters, and assign materials to parts as specified. Create drawing files for each part as shown with proper scales. Dimensions and centerlines are **optional**.

1. Toast rack (See Build Strategy for dimensions. Material: Stainless Steel)



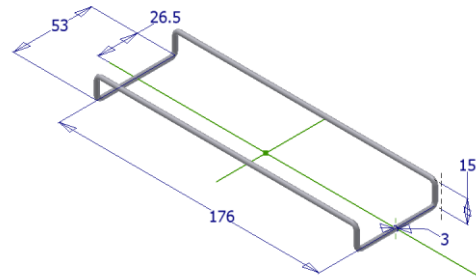
2. Top garlic press handle (Material: Stainless Steel)



Toaster Rack Build Strategy:

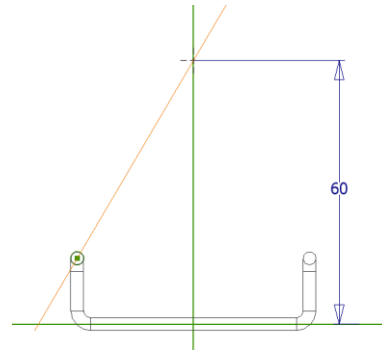
3D sweep feature

- Coil shape is a $\phi 3$ circle
- All 3D sweep bend radii R3



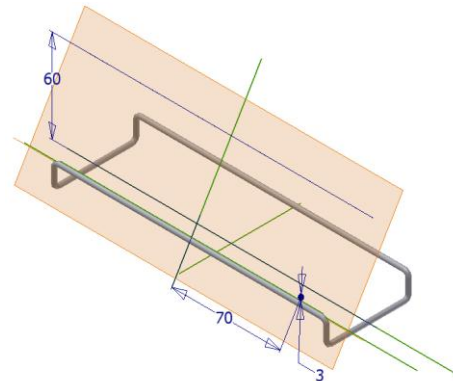
Angled work plane

- Work plane defined by axis of 176 mm leg of 3D sweep and the coil axis, 60 mm above default horizontal work plane.



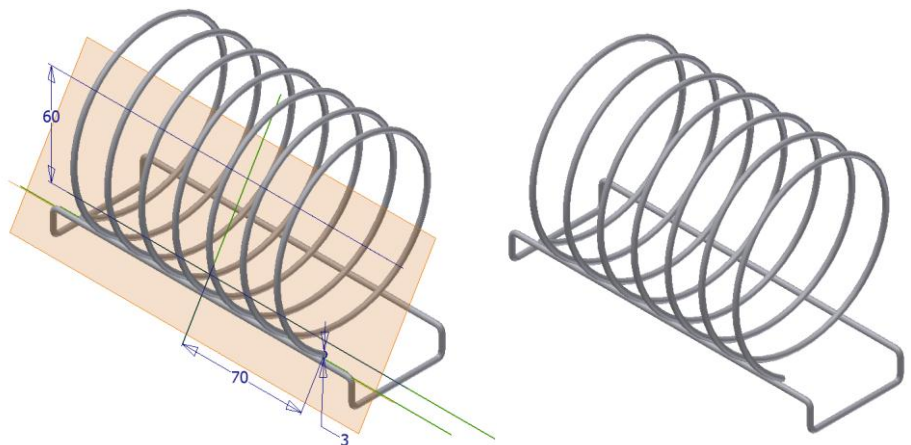
Coil cross section sketch

- Circle to be sketched on the angled work plane
- Circular coil shape tangent to 176 mm leg of 3D sweep

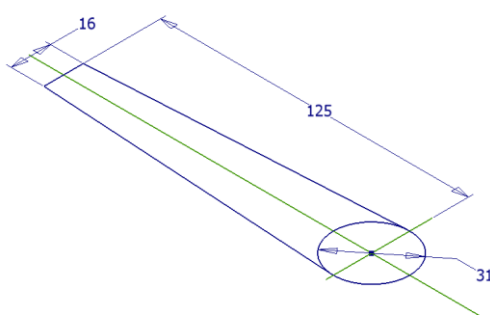
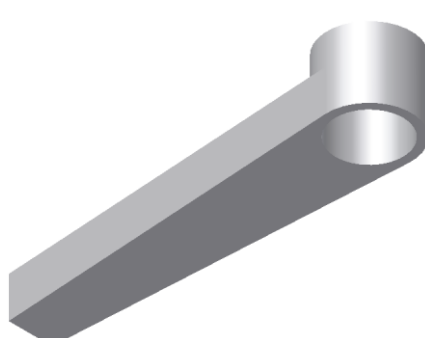
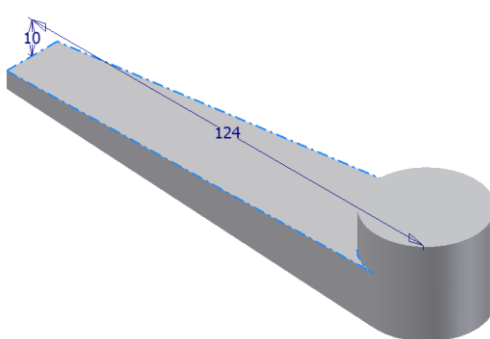

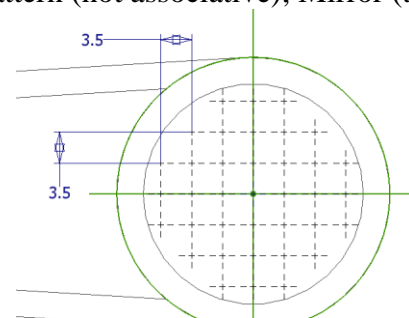
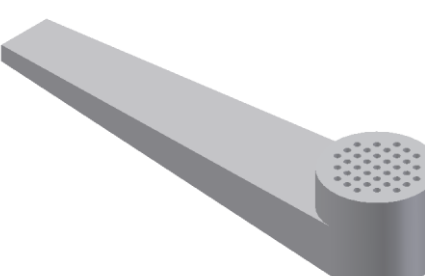
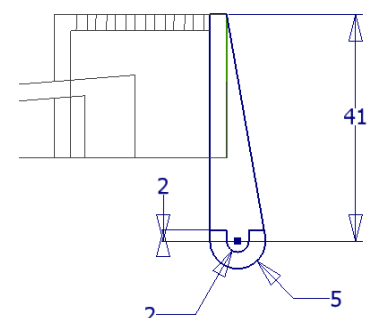
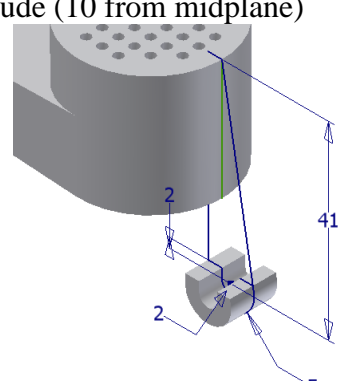


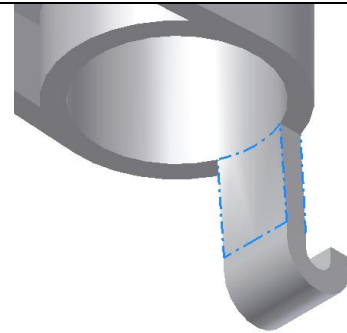
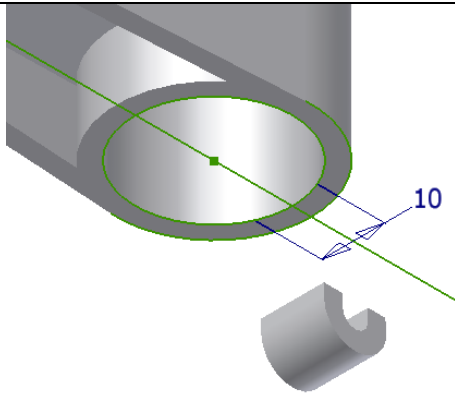
Coil feature

- Coil size parameters:
- Height = 140 mm
- Revolution = 7.01

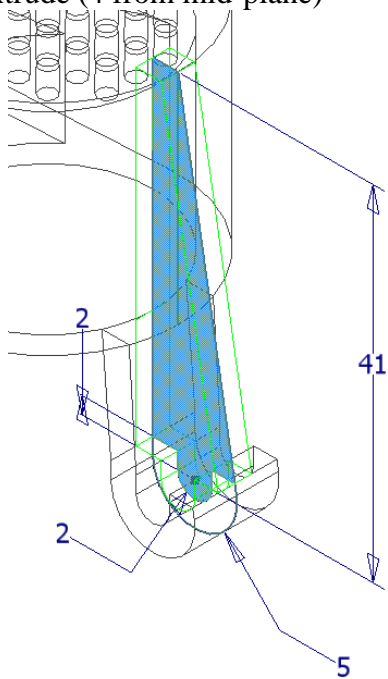


Top Garlic Press Build Strategy:

<p>1. Sketch</p> 	<p>2. Extrude circle (distance = 26) 3. Shell cylinder (3 wall, open at bottom) 4. Share sketch, extrude (distance = 15)</p> 
<p>5. Chamfer</p> 	<p>6. Shell (3 wall, open at bottom)</p> 
<p>7. Sketch (Point, Hole Center; Rectangular Pattern (not associative); Mirror (twice))</p> 	<p>8. Hole</p> 
<p>9. Sketch on center plane</p> 	<p>10. Extrude (10 from midplane)</p> 
<p>11. Sketch</p>	<p>12. Loft</p>



13. Extrude (4 from mid-plane)



14. Multiple fillets (see drawing for details)

