

Computer Aided Design – Module 2

Lesson ? – Baking Tray

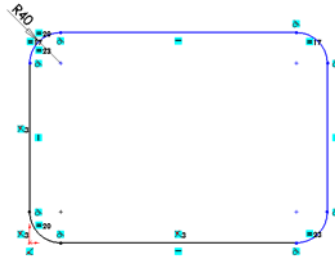


Lesson 1 – Baking Tray

Commands used: Sketch Rectangle, Sketch Fillet, Circle, Smart dimension, Extrude Boss/Base, Linear Pattern, Shell, Fillet & Edit Material

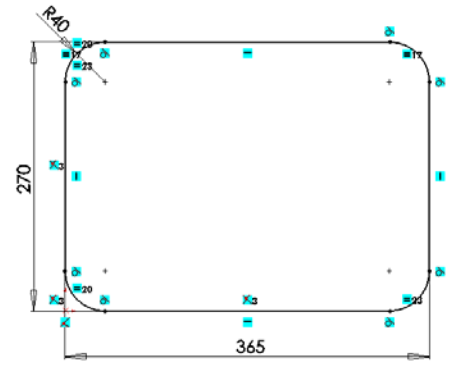
Approach to Lesson:

Create sketch top of tray Create the sketch on the **Top Plane** using the Rectangle sketch command.



Use **Sketch Fillet** to apply a fillet of 40mm to the corners

Use **Smart Dimension** to dimension the sketch



Extruded Boss/Base

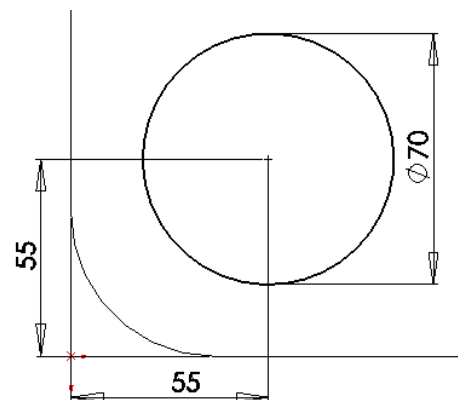
Extrude the sketch using **Extruded Boss/Base**. Select **Blind** as the end condition and a distance of 6mm.

Rename the feature as 'Top of tray'.

Create sketch for cup

Select the top face of the tray as the plane for this sketch

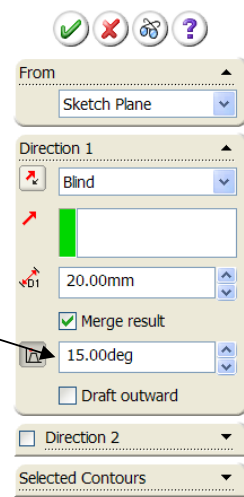
Sketch with **Circle** and **Smart Dimension**



Extruded Boss/Base for Cup

Extrude the sketch using **Blind** as the end condition and a distance of 20mm.

Select a draft angle of 15°.

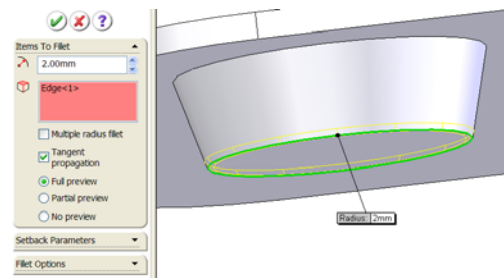


Rename the feature as 'Cup'

Apply Fillet to Cup

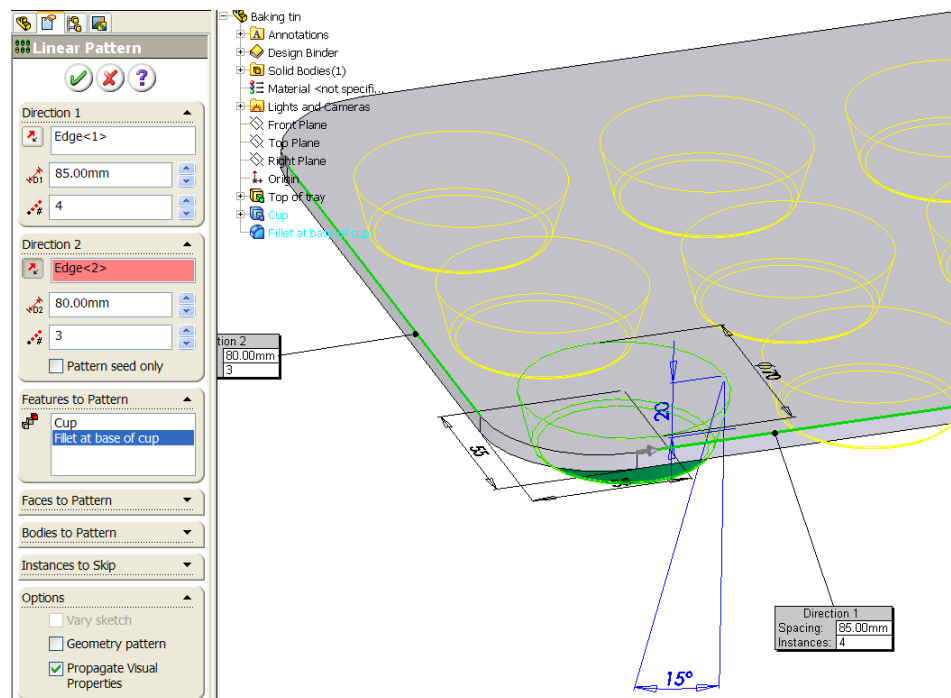
Apply a 2mm fillet to the base edge of the cup using the Fillet feature

Rename the feature as 'Fillet at base of cup'.



Linear Pattern of Cup

Use **Linear Pattern** to create the other cups using the criteria shown below.

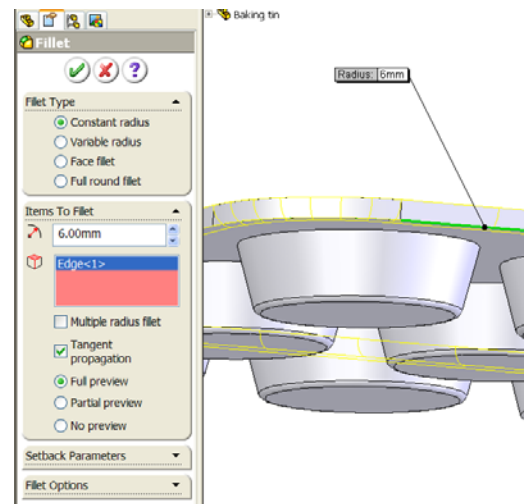


Rename feature as 'Cup patterned'

Apply fillet edge of Tray top

Apply a 6mm fillet to the bottom edge of the top of the tray.

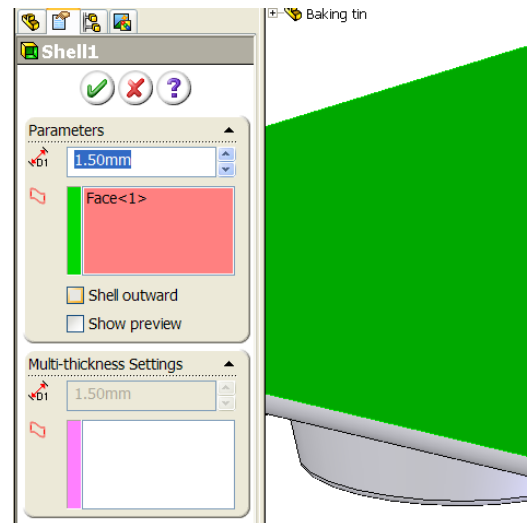
Rename the feature as '6mm edge fillet'.



Shell the tray

Apply a wall thickness of 1.5mm and remove the top face

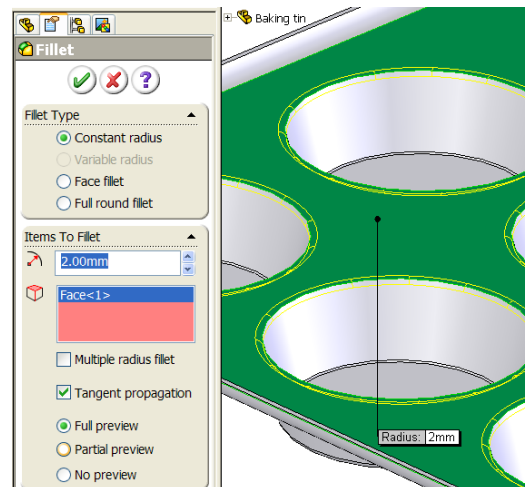
Rename the feature as 'Tray shelled'.



Fillet top surface

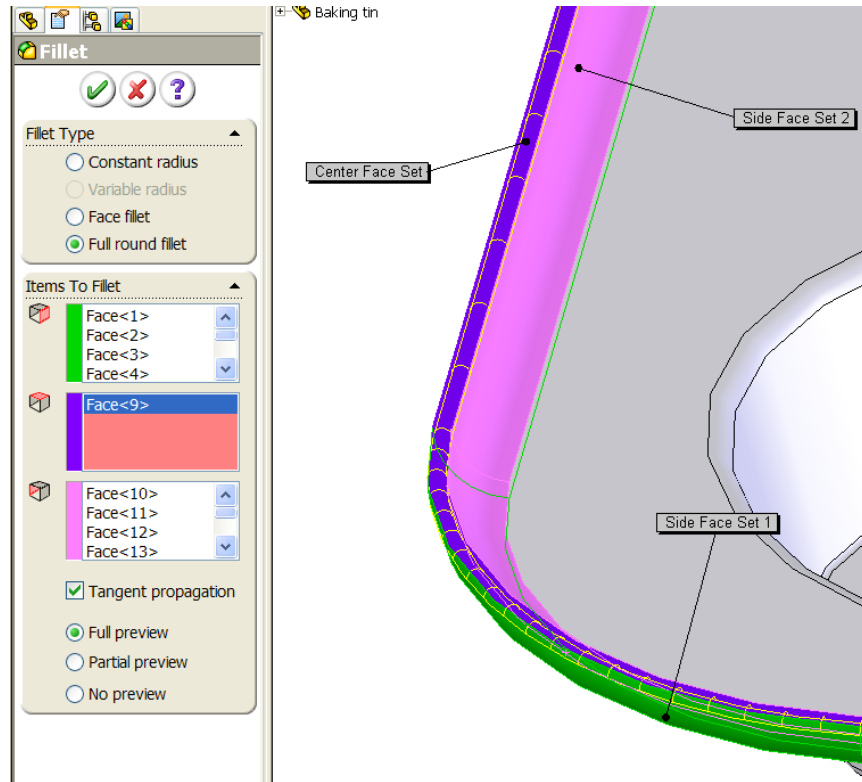
Apply a 2mm fillet to the top surface of the tray.

Rename the feature as 'Top surface fillet'



Full round fillet

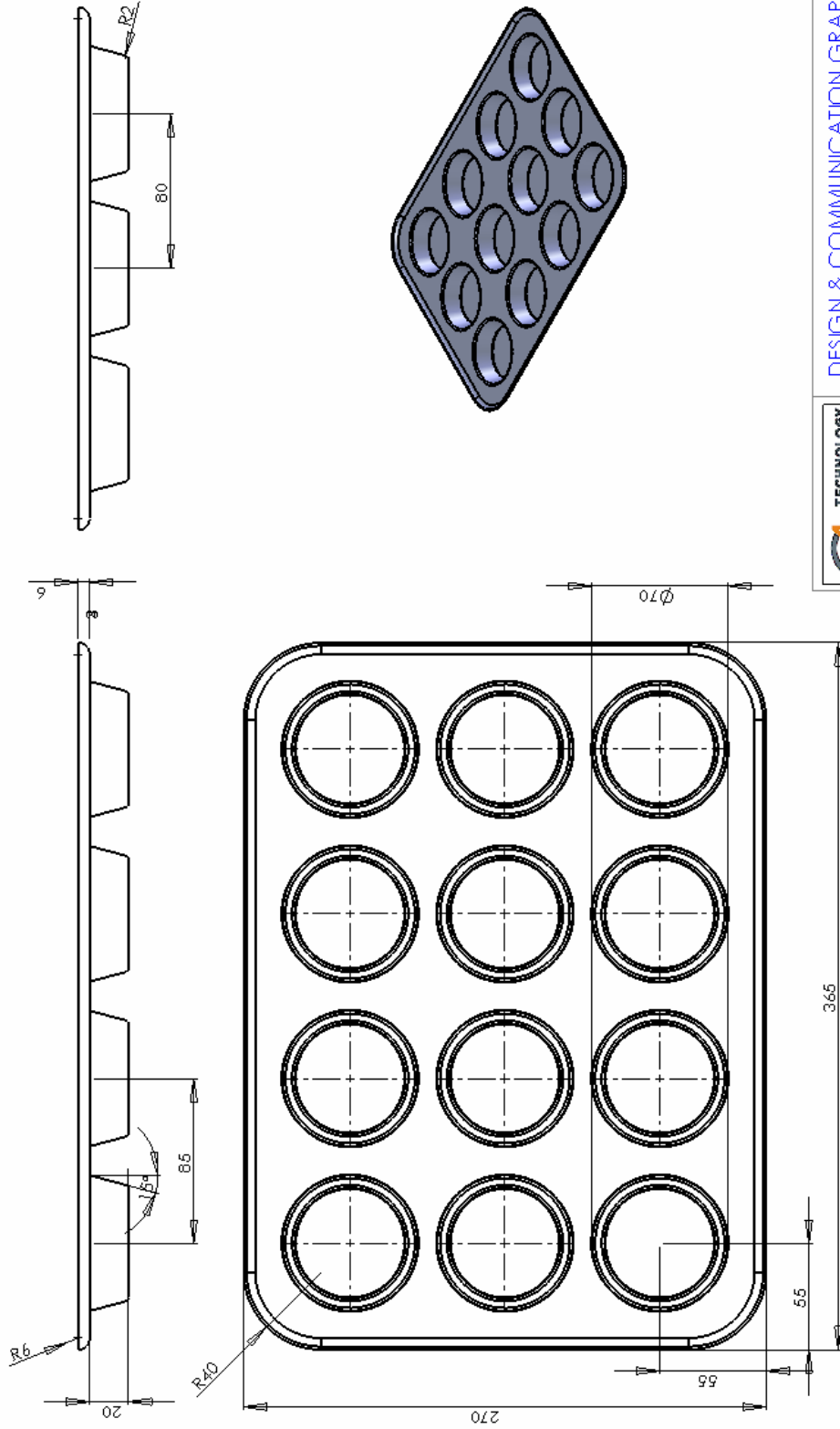
Apply a full round fillet to the top edge of the baking tray.



Rename as 'Full round fillet'.

Edit Material

Apply a **Chrome Stainless Steel** finish using **Edit Material**



DESIGN & COMMUNICATION GRAPHICS

TITLE: Baking tray

DATE: 16/10/2007

SCALE: 1:5

SHEET 1 OF 1

TECHNOLOGY
SUPPORT
SERVICE

UNITS: OTHERS ARE SPECIFIED ALL DIMENSIONS IN mm

SIZE AS DRAWN BY: YOUR NAME HERE

DATE: 16/10/2007



