

# **THERMODYNAMIC SYSTEM**

## **DESIGN & ANALYSIS**

**UNILAG ANSYS HANDS-ON TUTORIAL 1**

# **THERMODYNAMIC SYSTEM DESIGN & ANALYSIS**

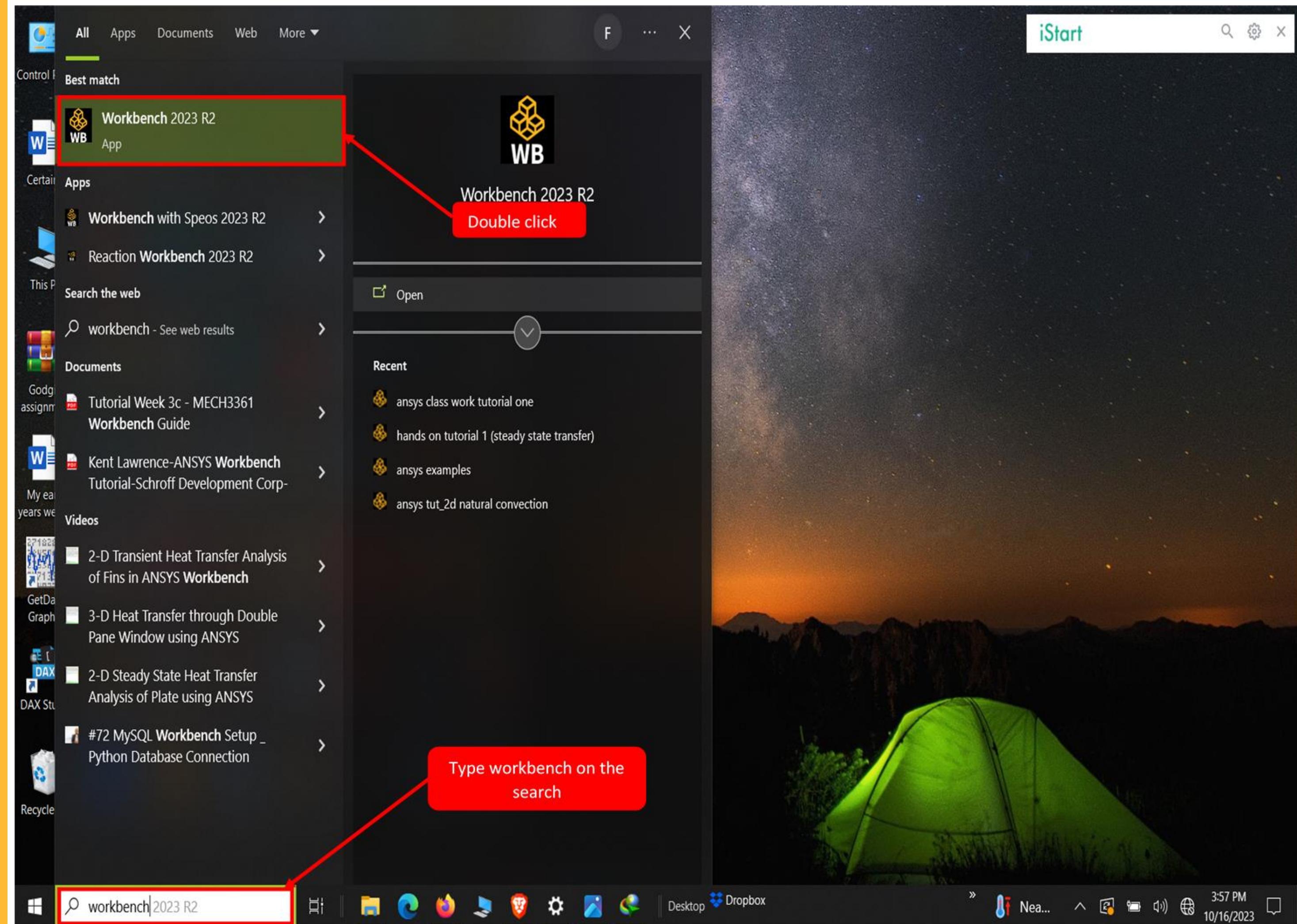
**This is a beginner's tutorial for second year undergraduate students using ANSYS Workbench for the first time. At the end of this first tutorial, you will be able to**

- Start up your ANSYS Workbench**
- Create the geometry for a simple mixing tank problem**

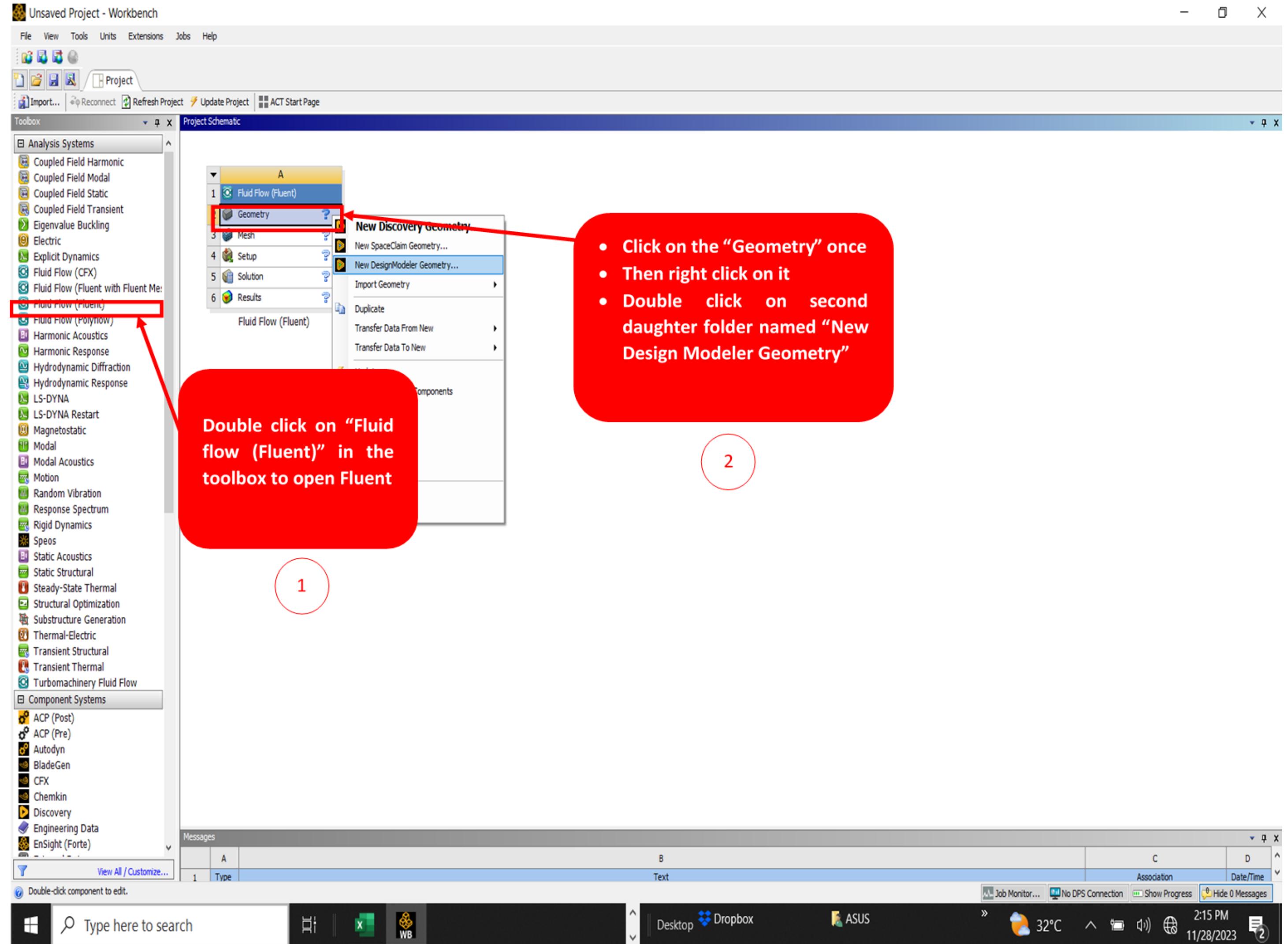
# **CREATING THE GEOMETRY**

# STARTING UP

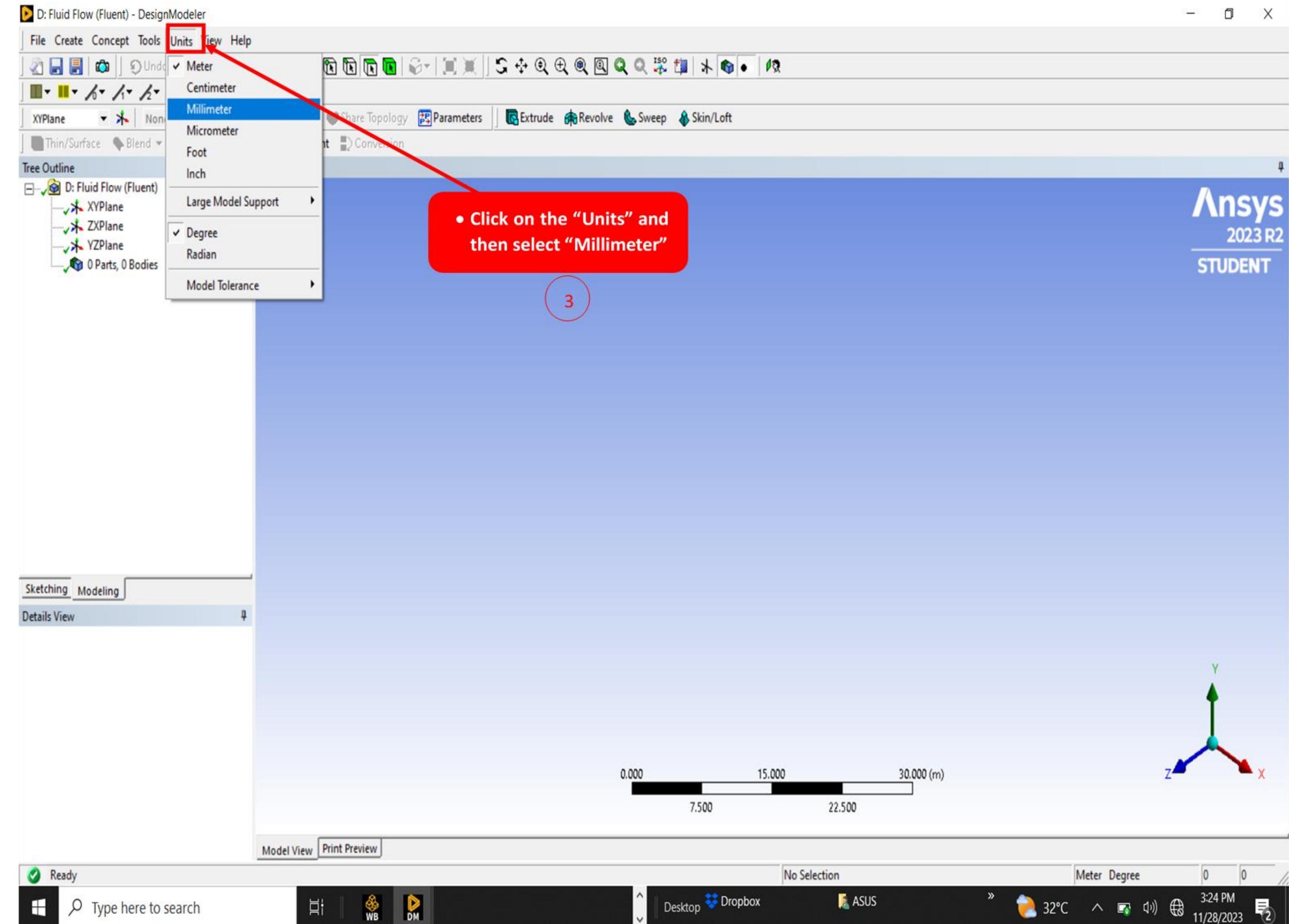
## ANSYS WORKBENCH



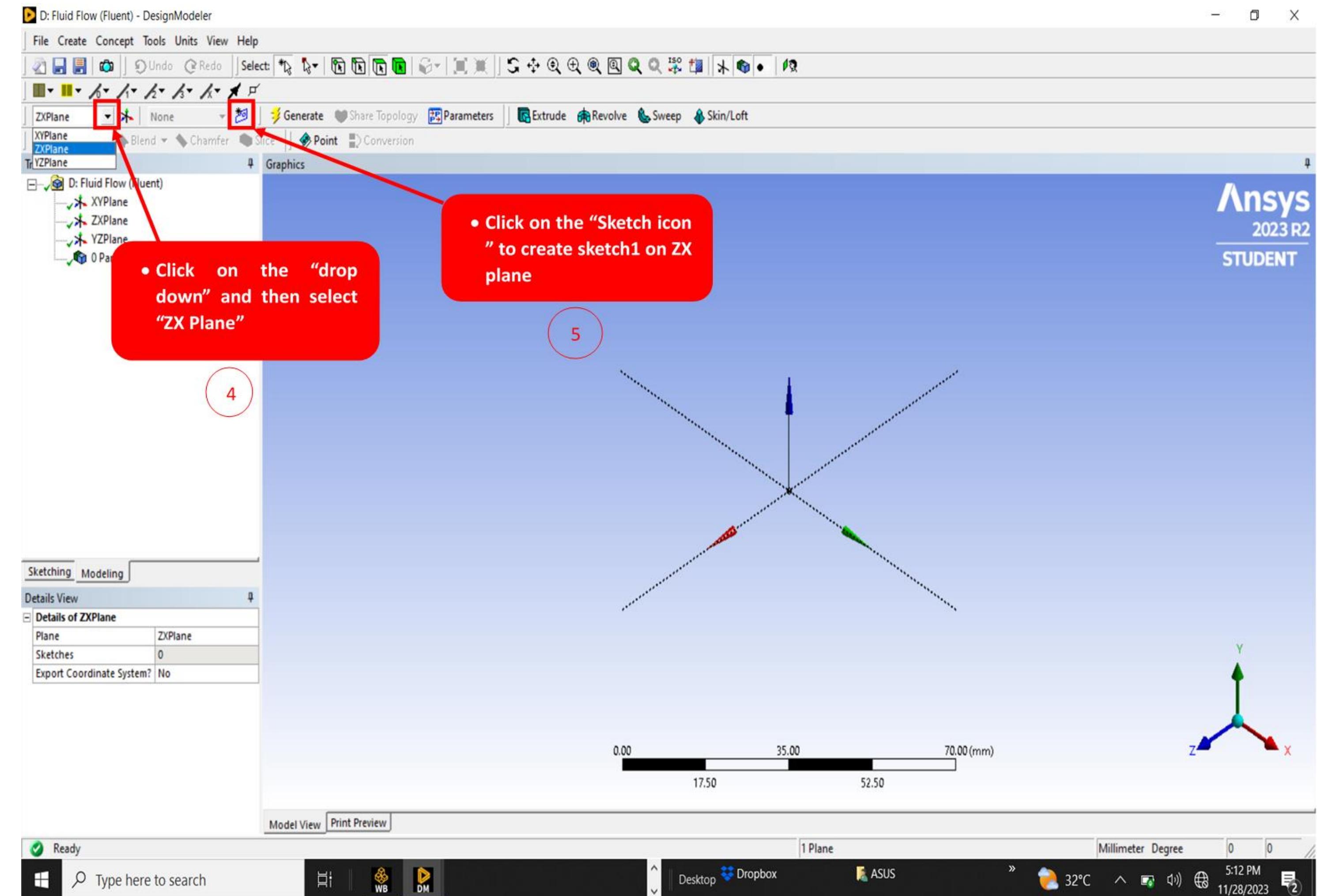
# ANSYS FLUENT TOOL



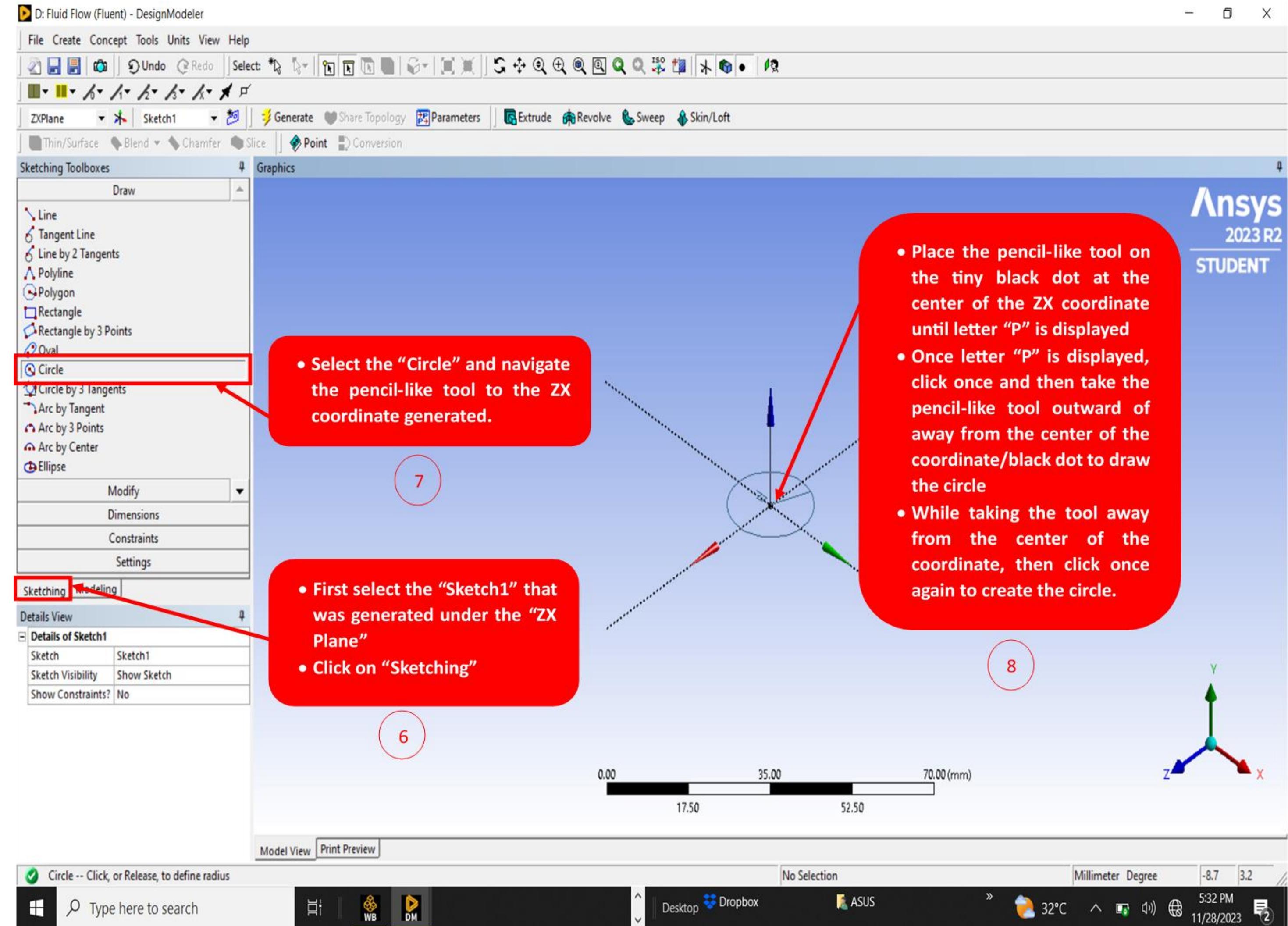
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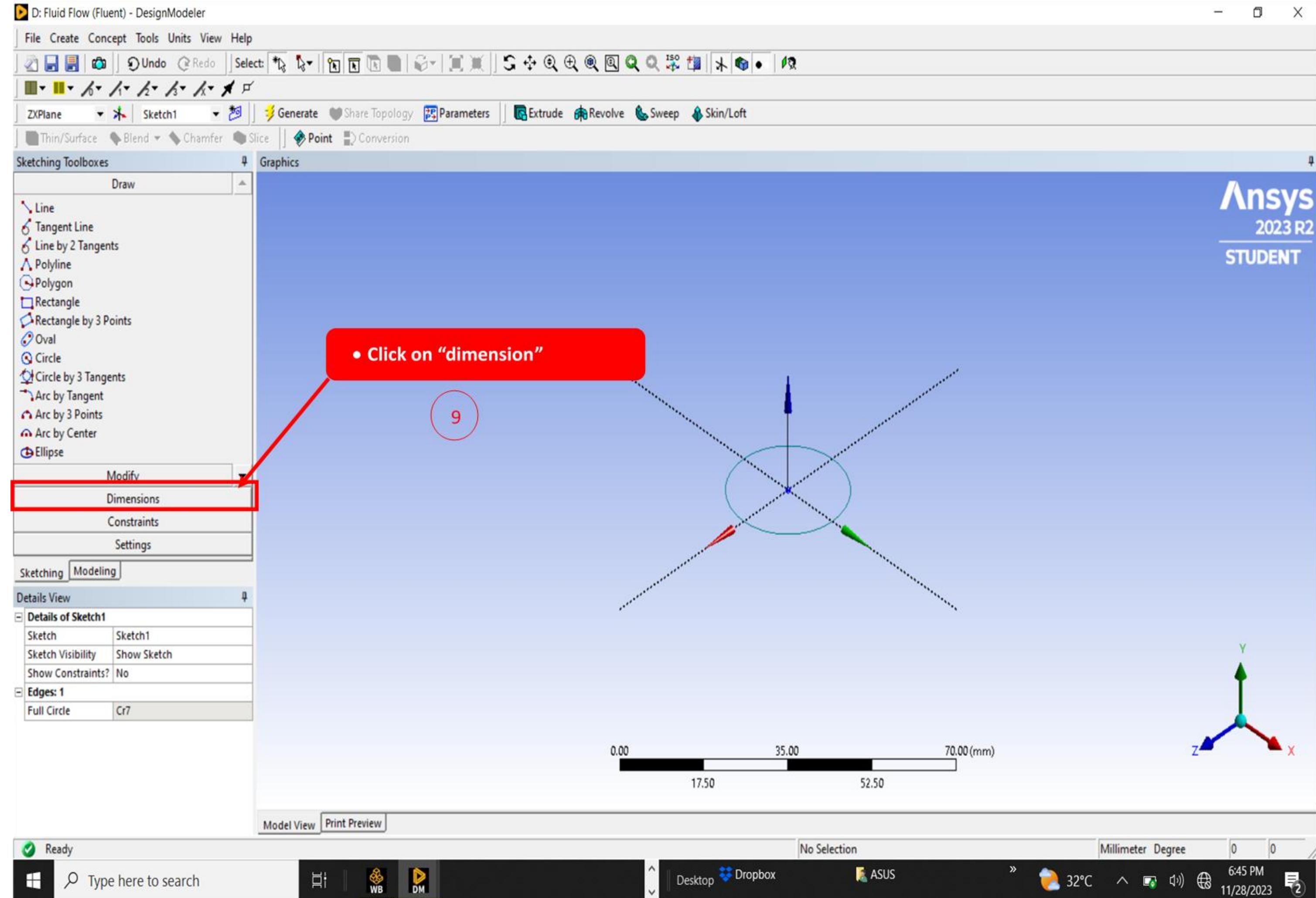
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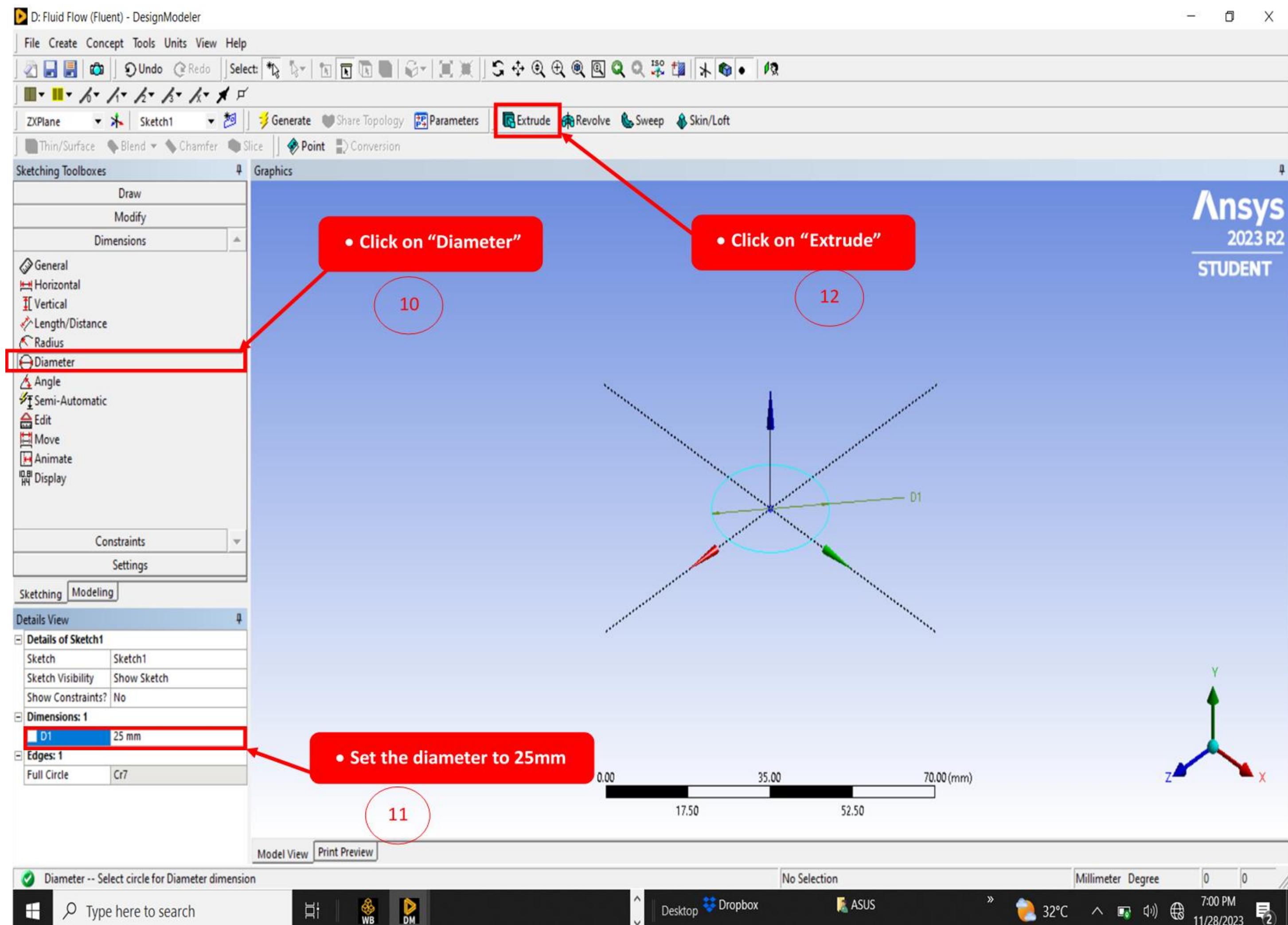
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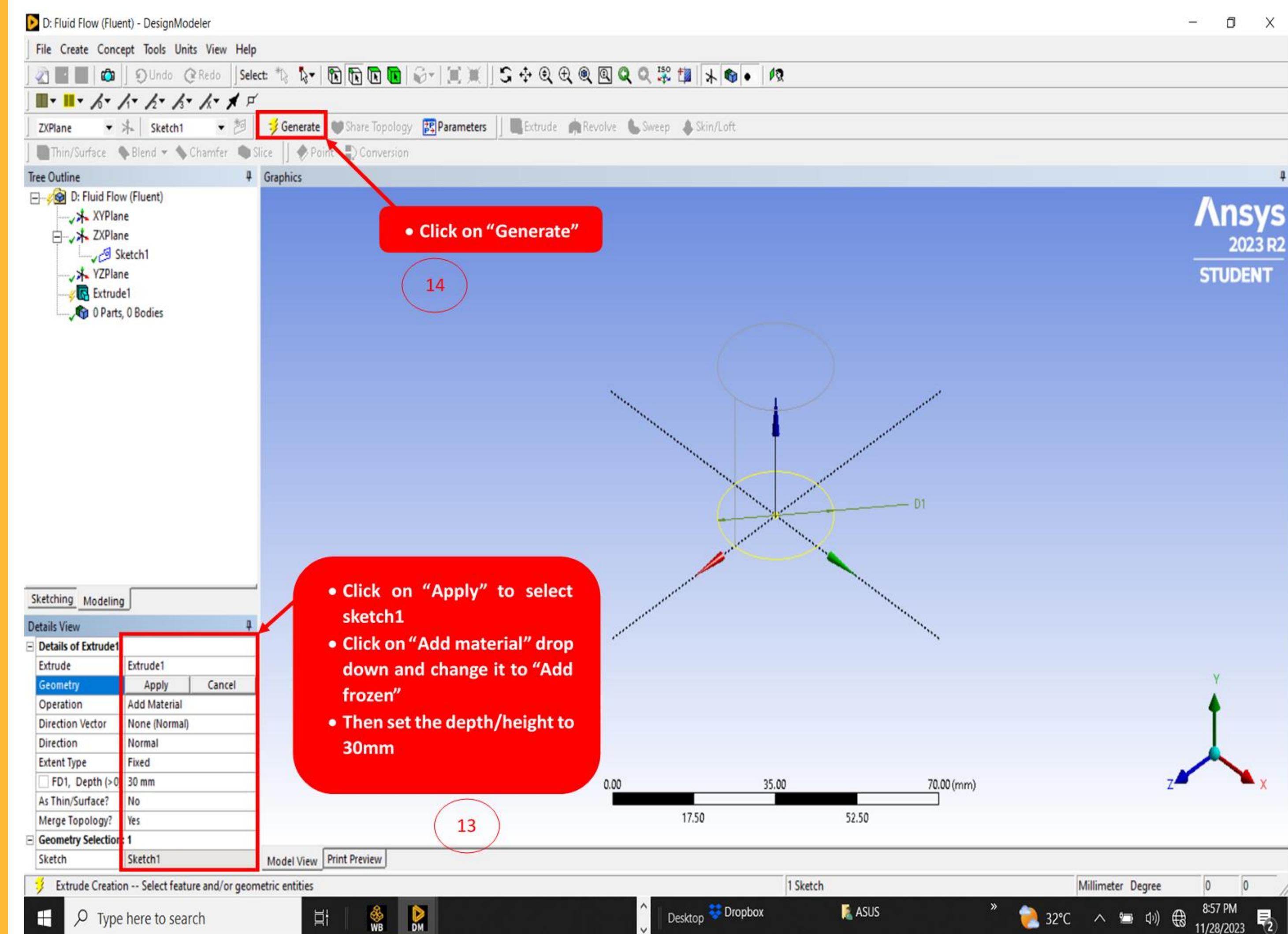
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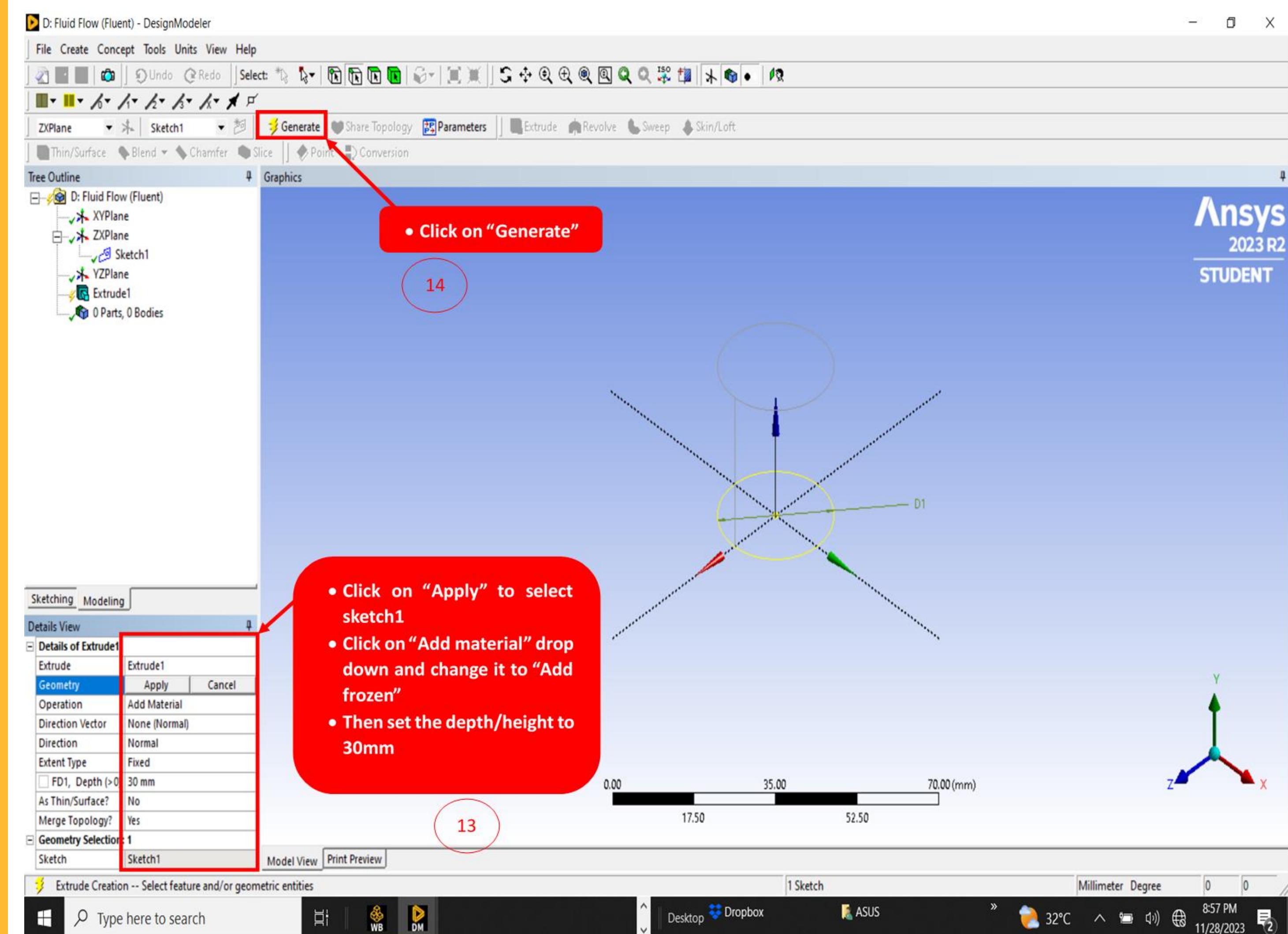
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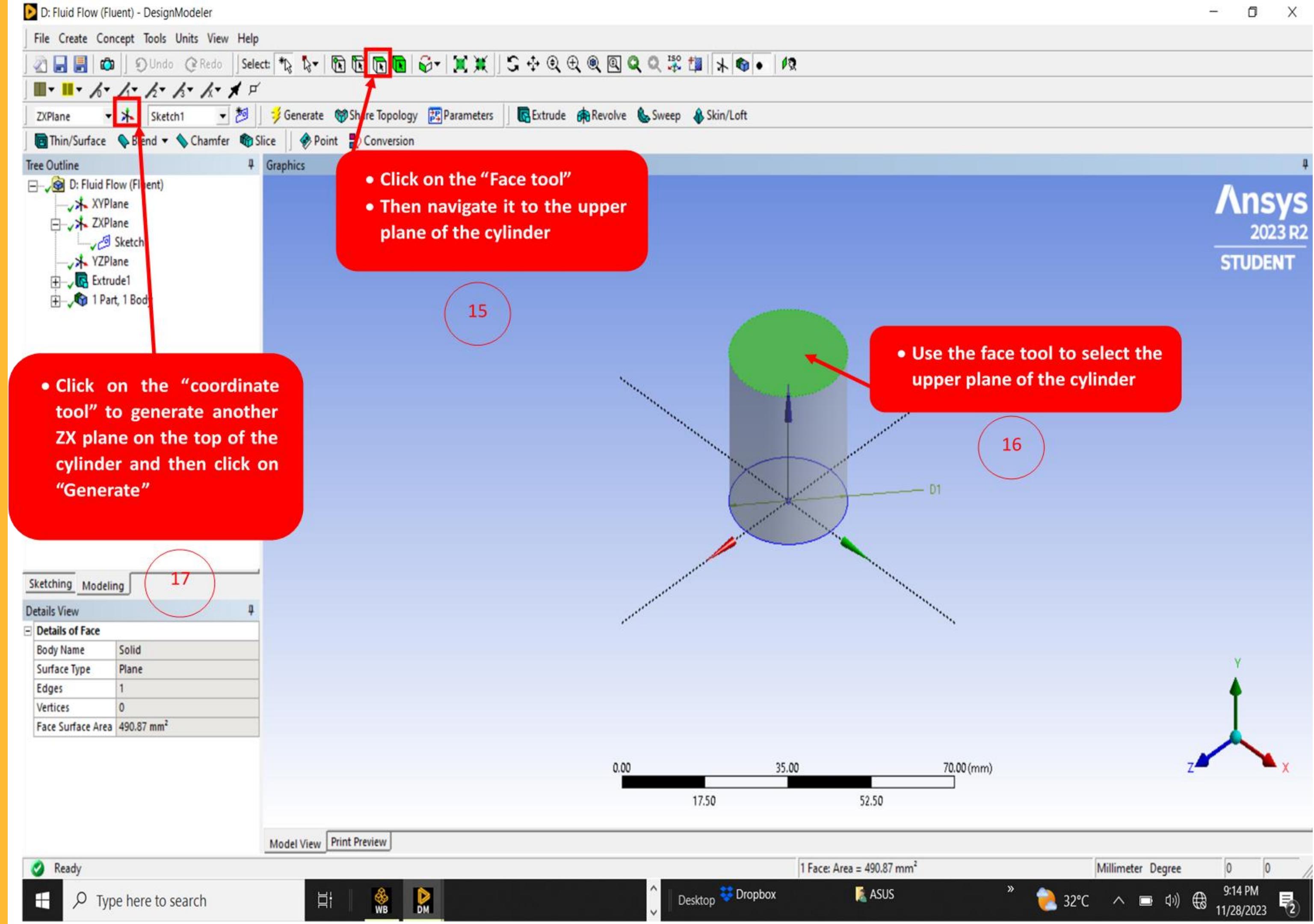
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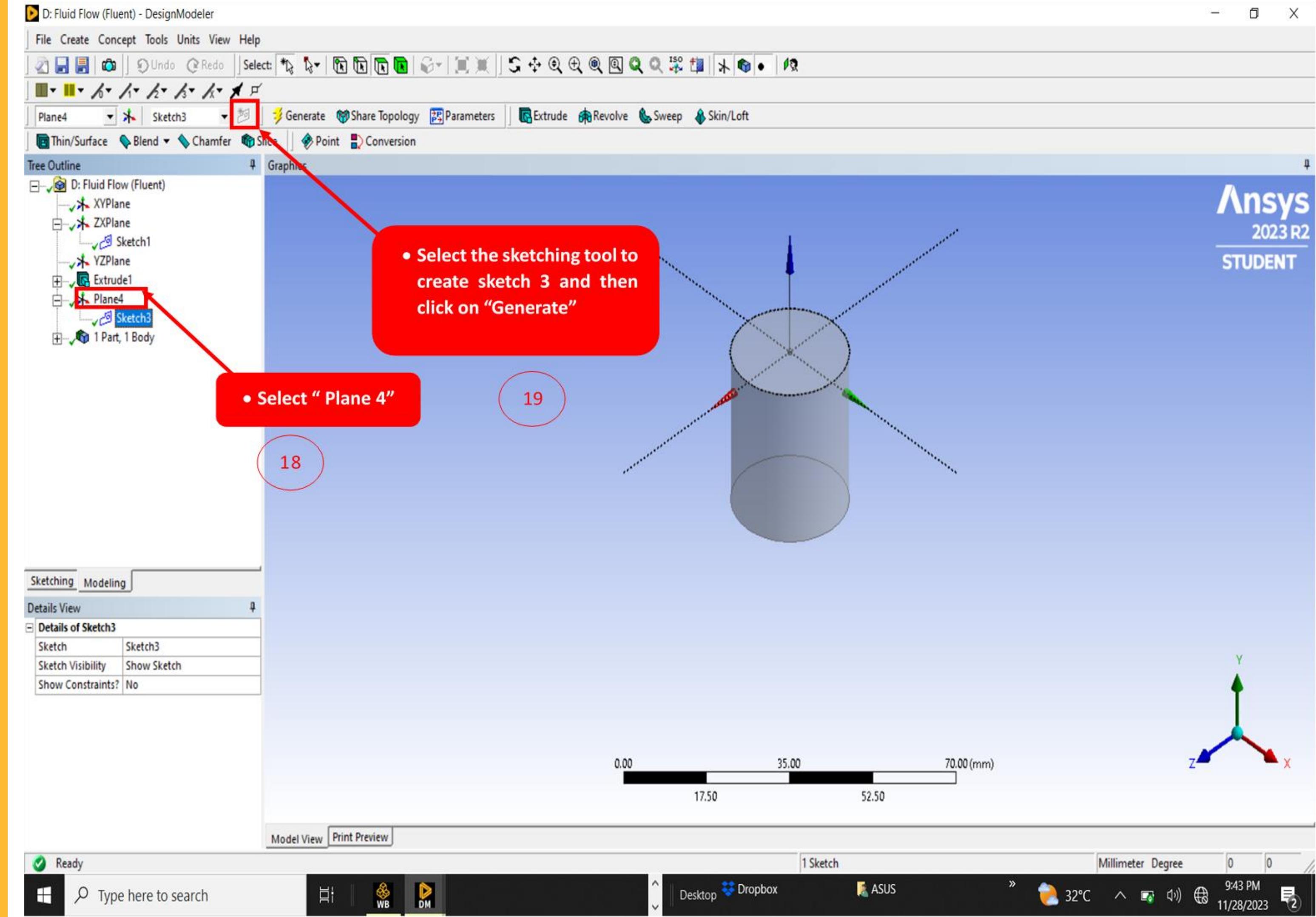
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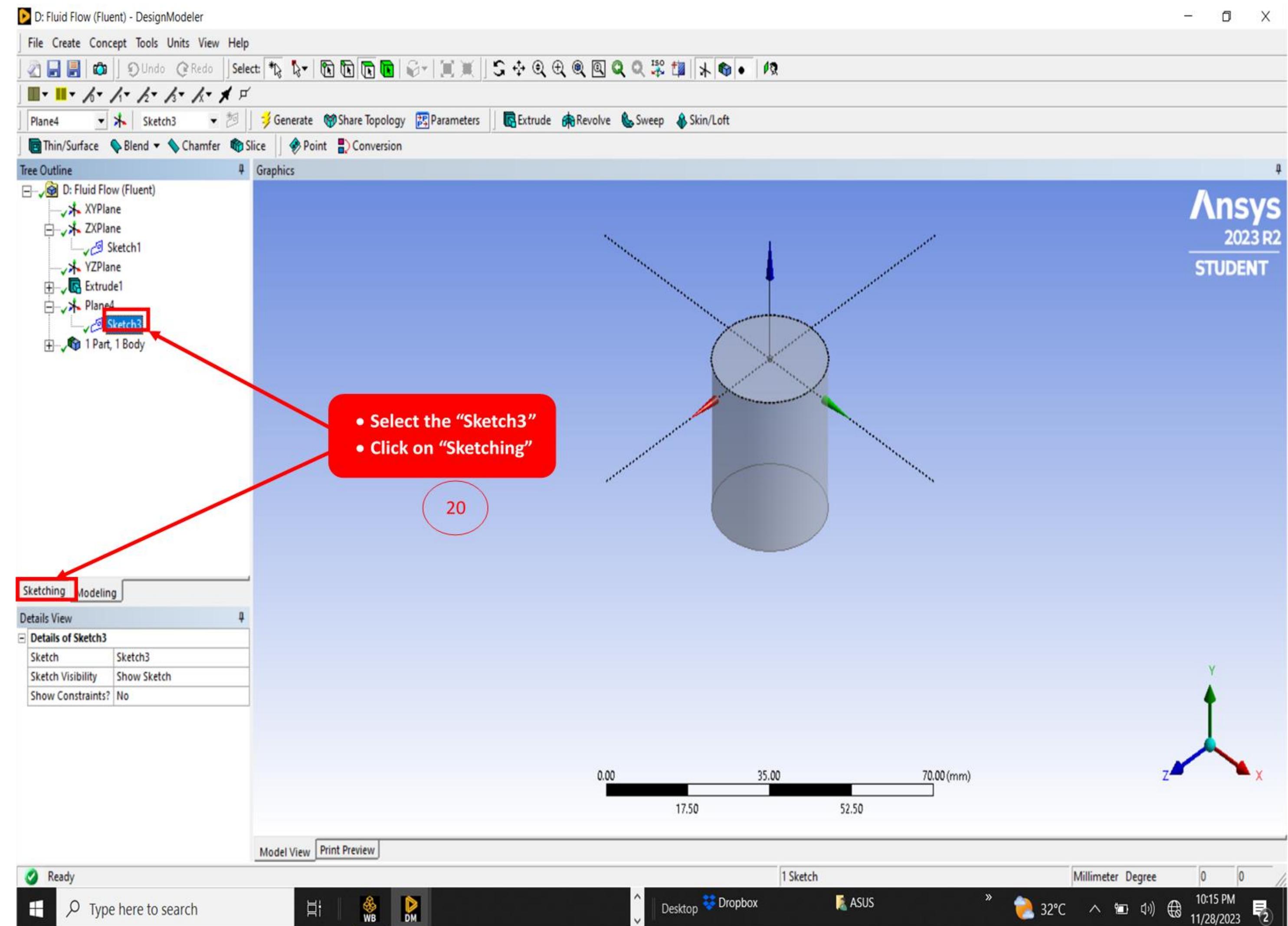
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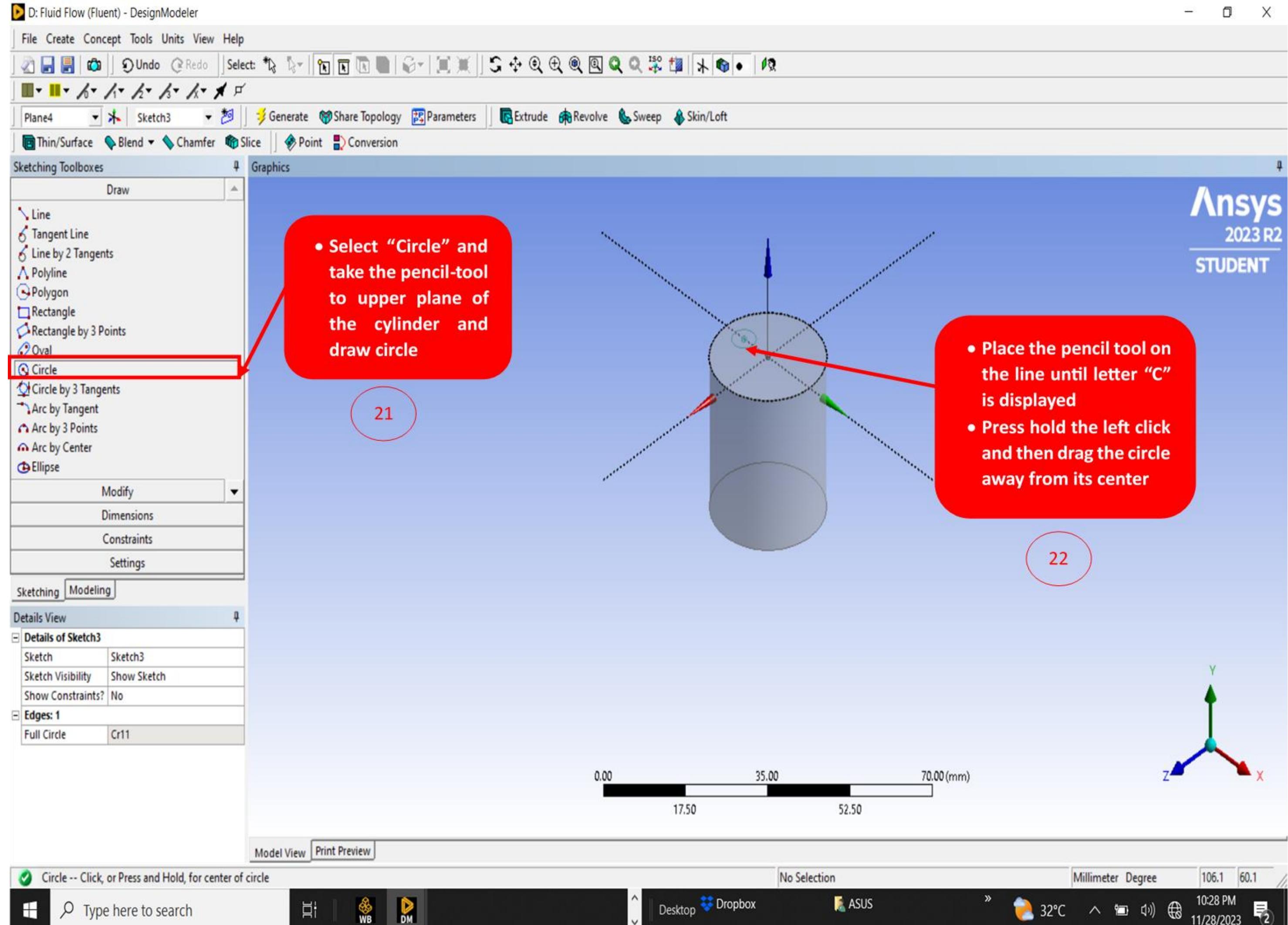
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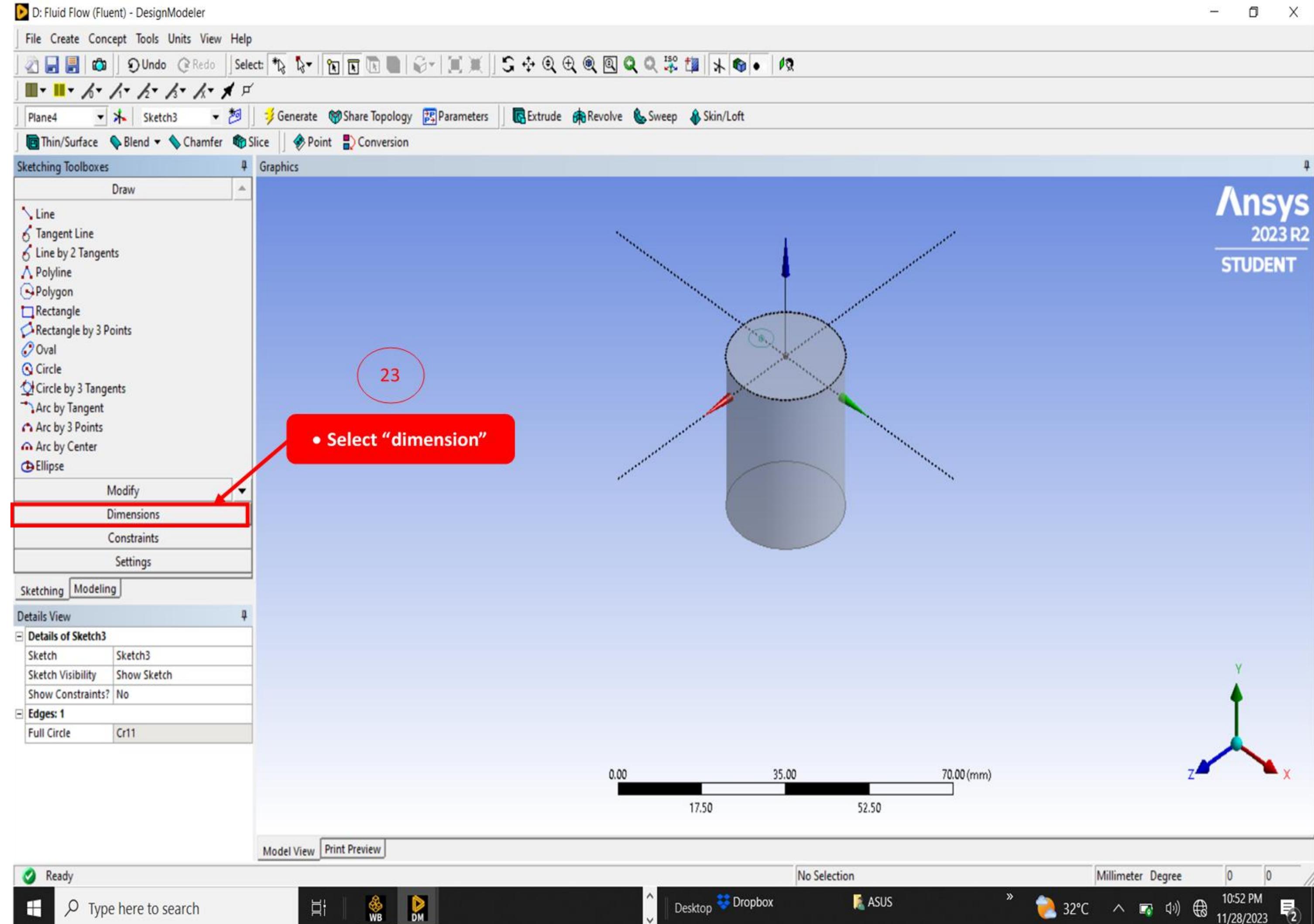
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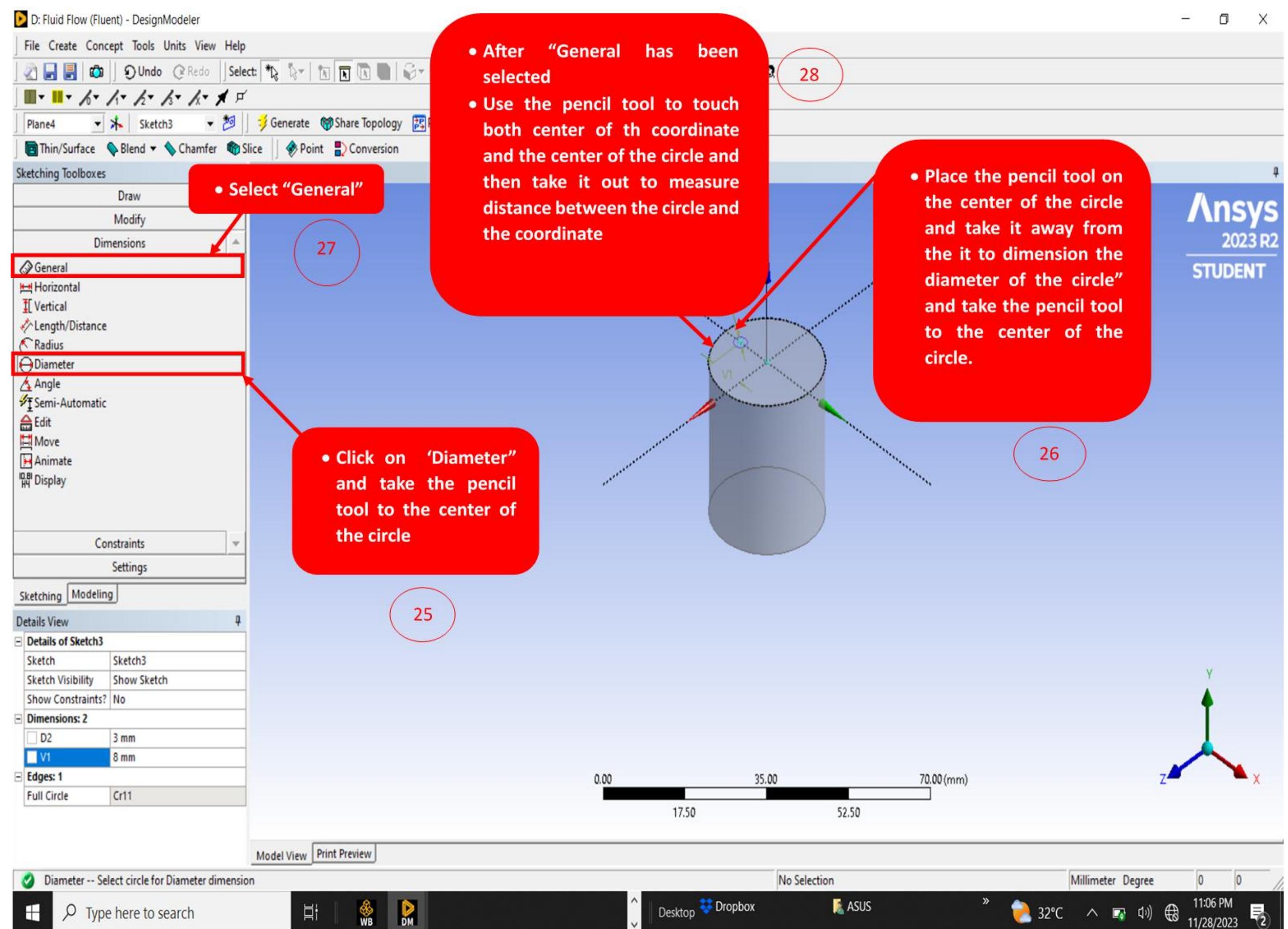
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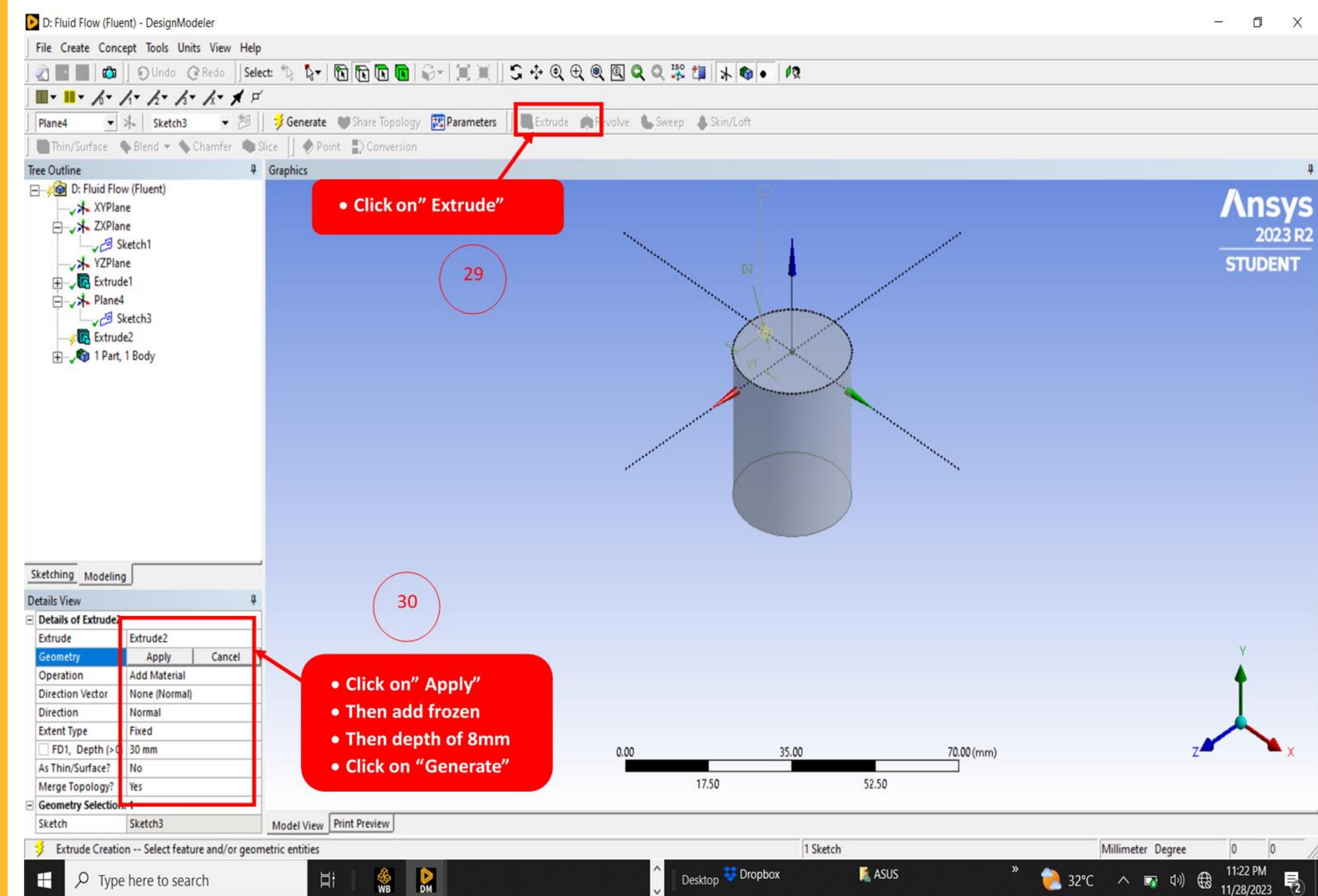
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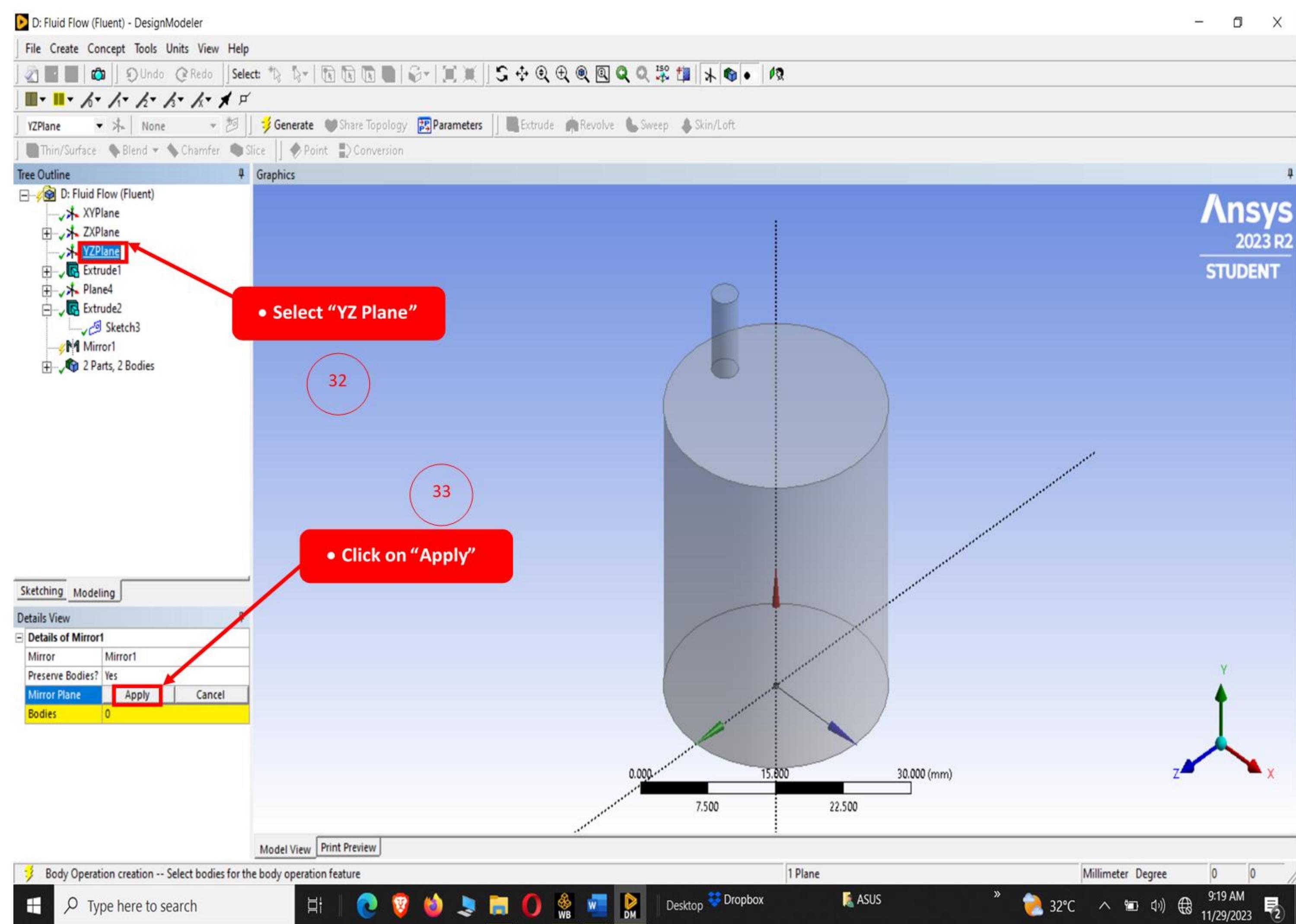
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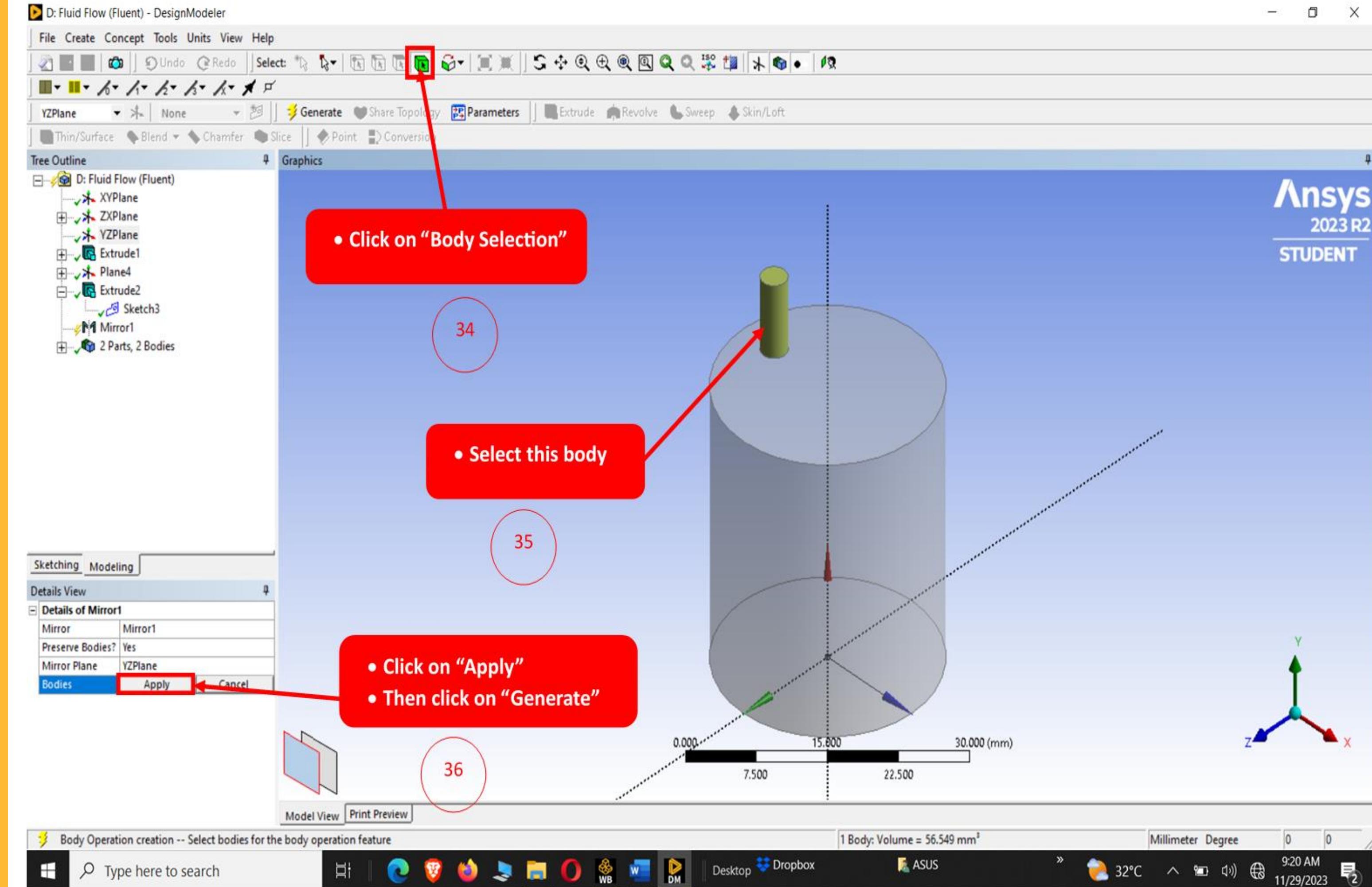
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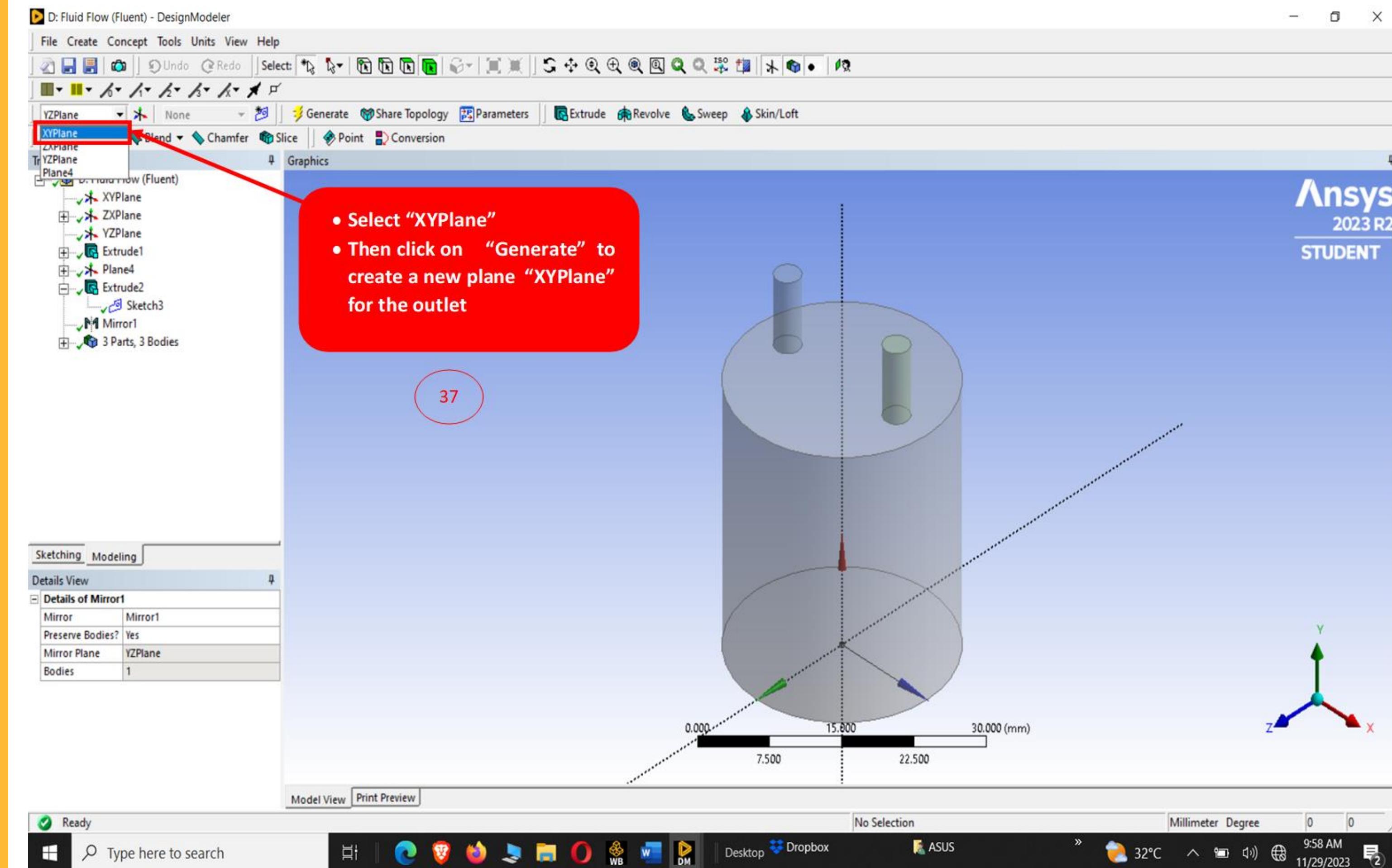
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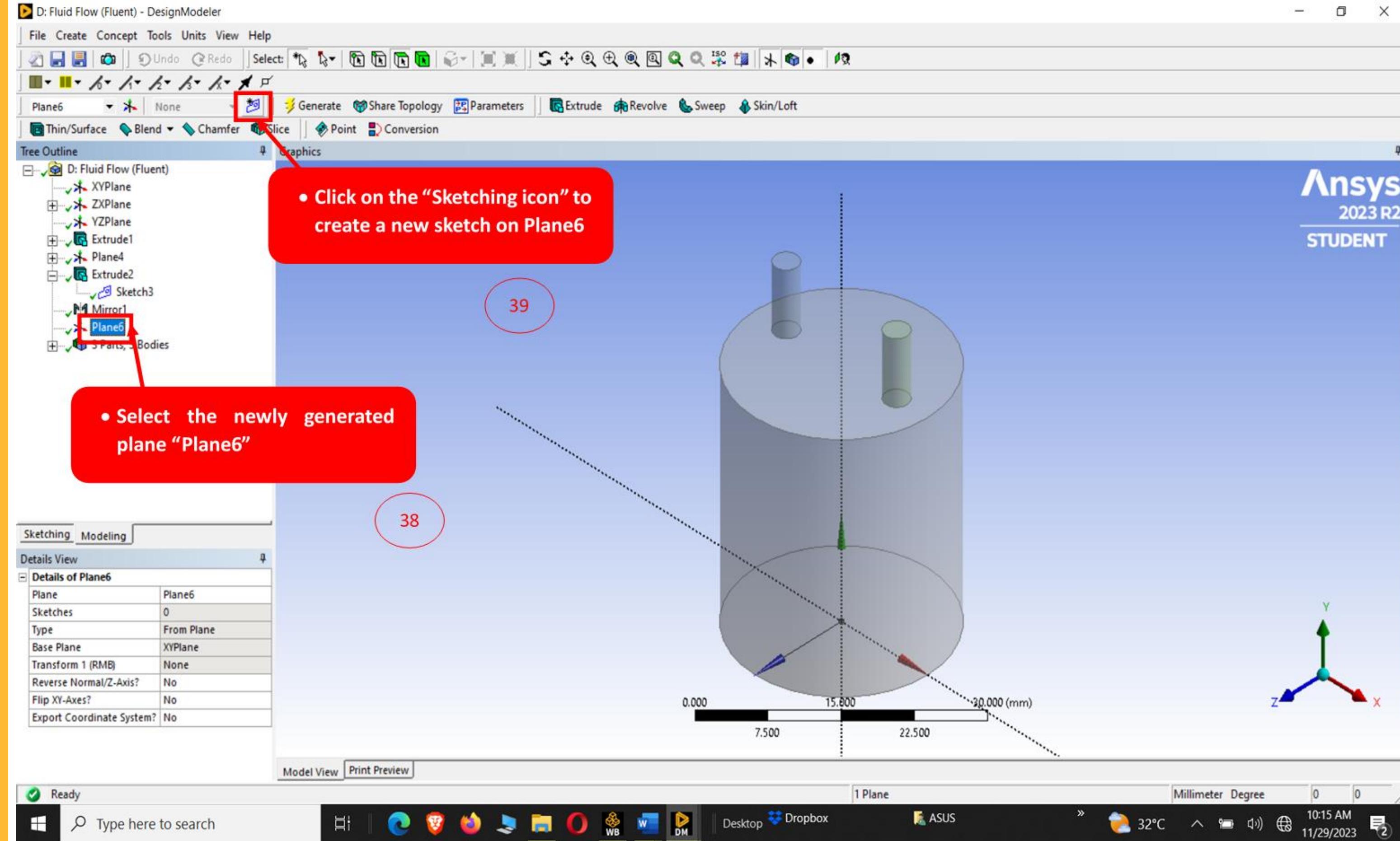
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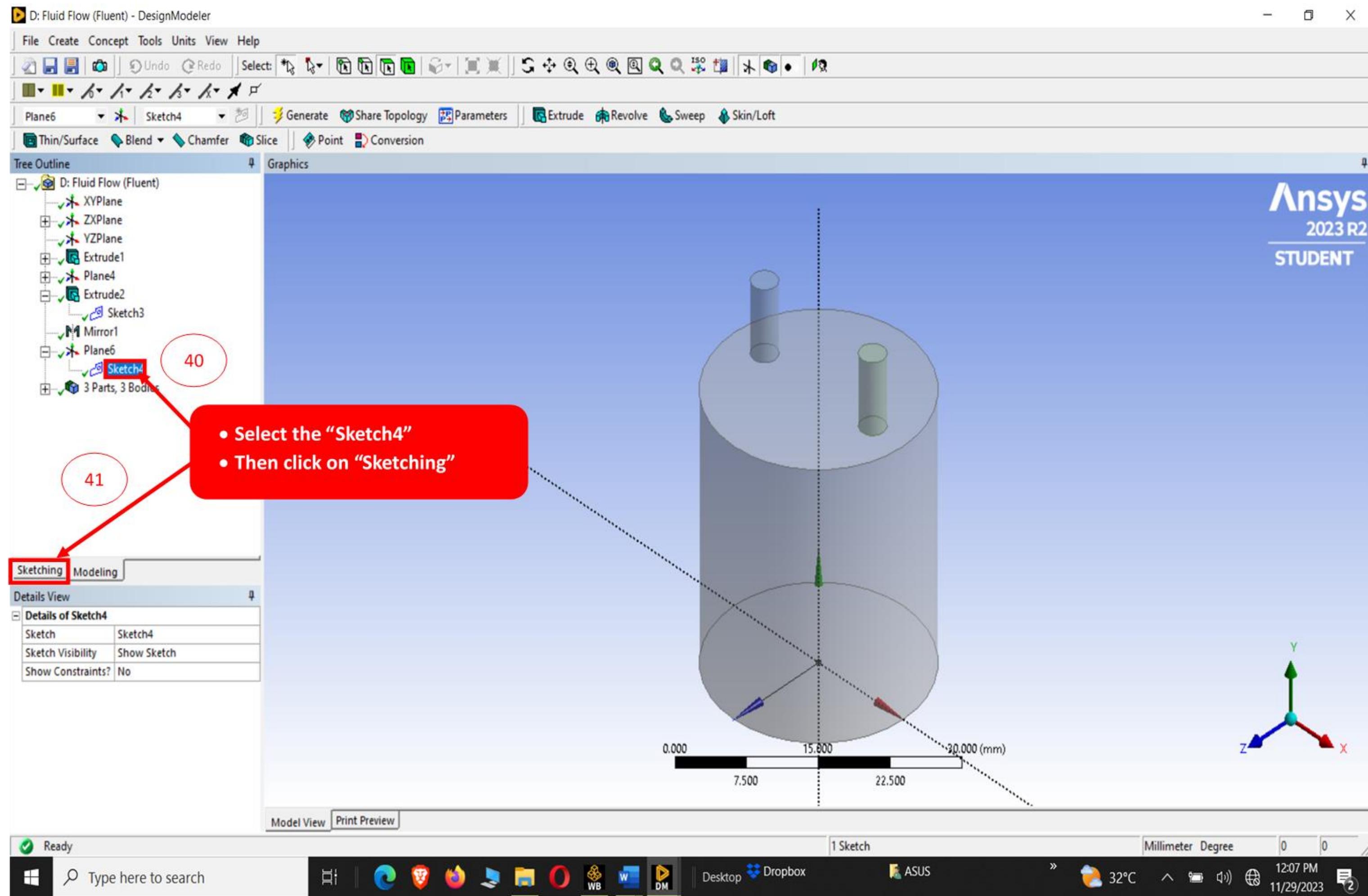
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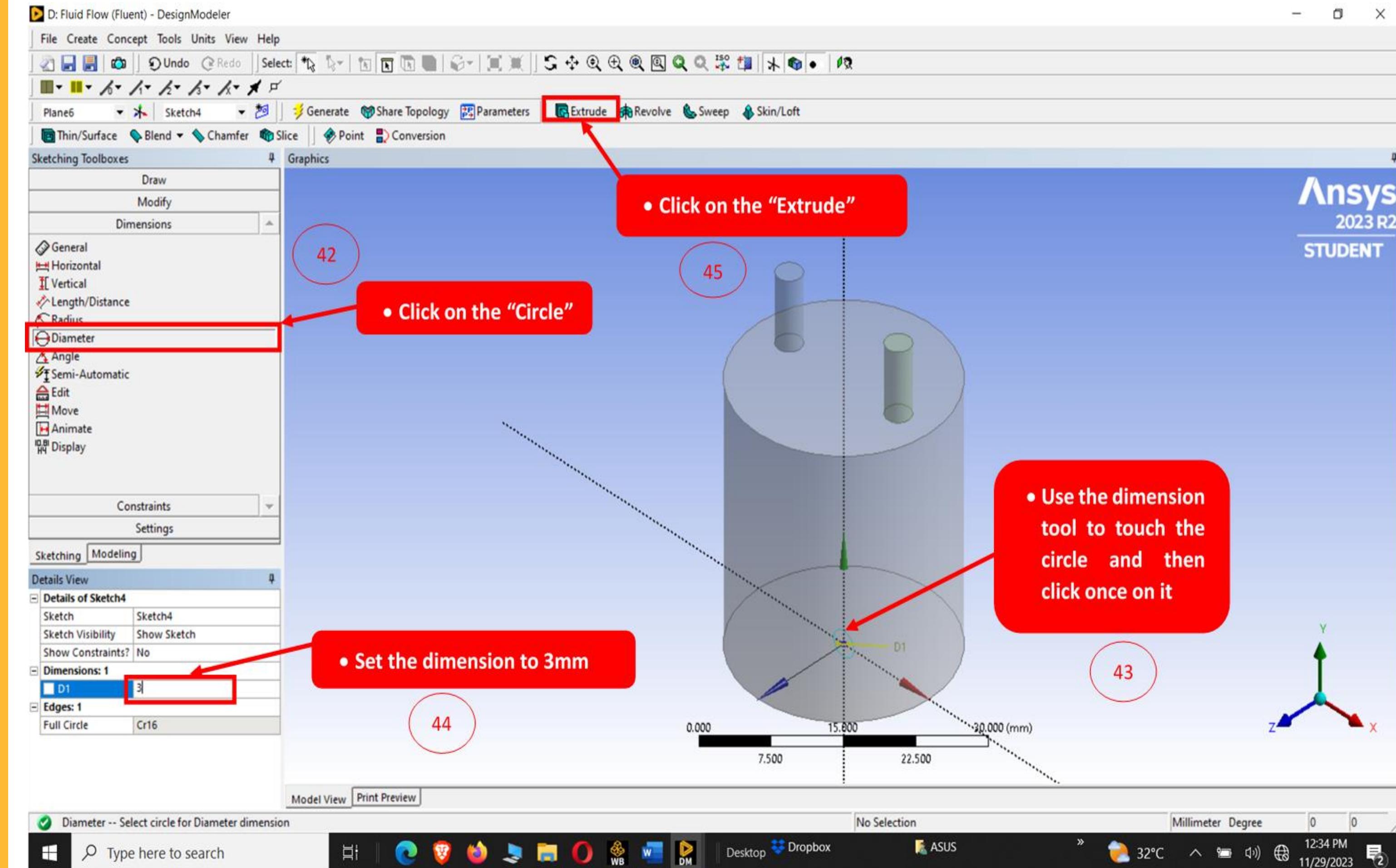
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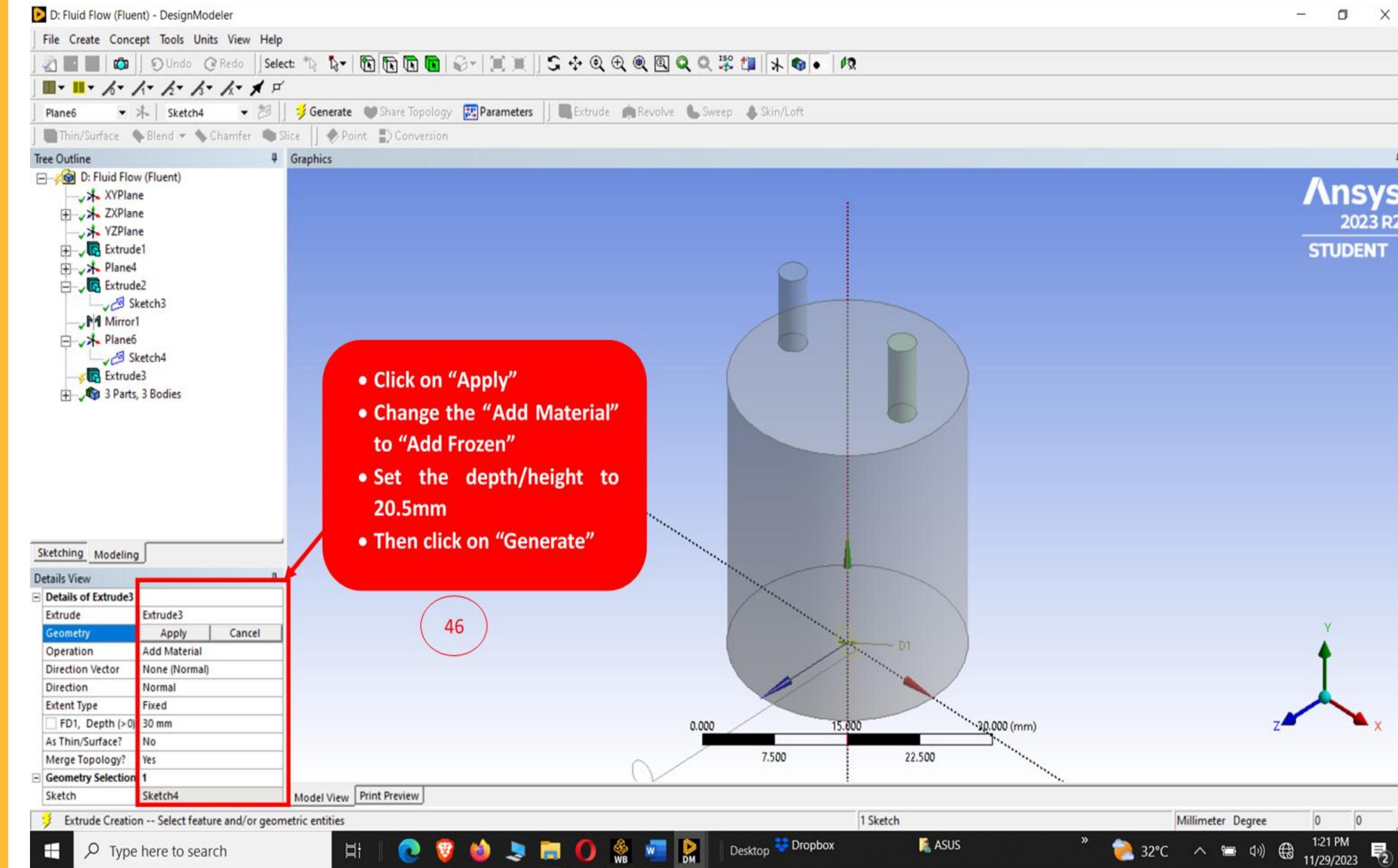
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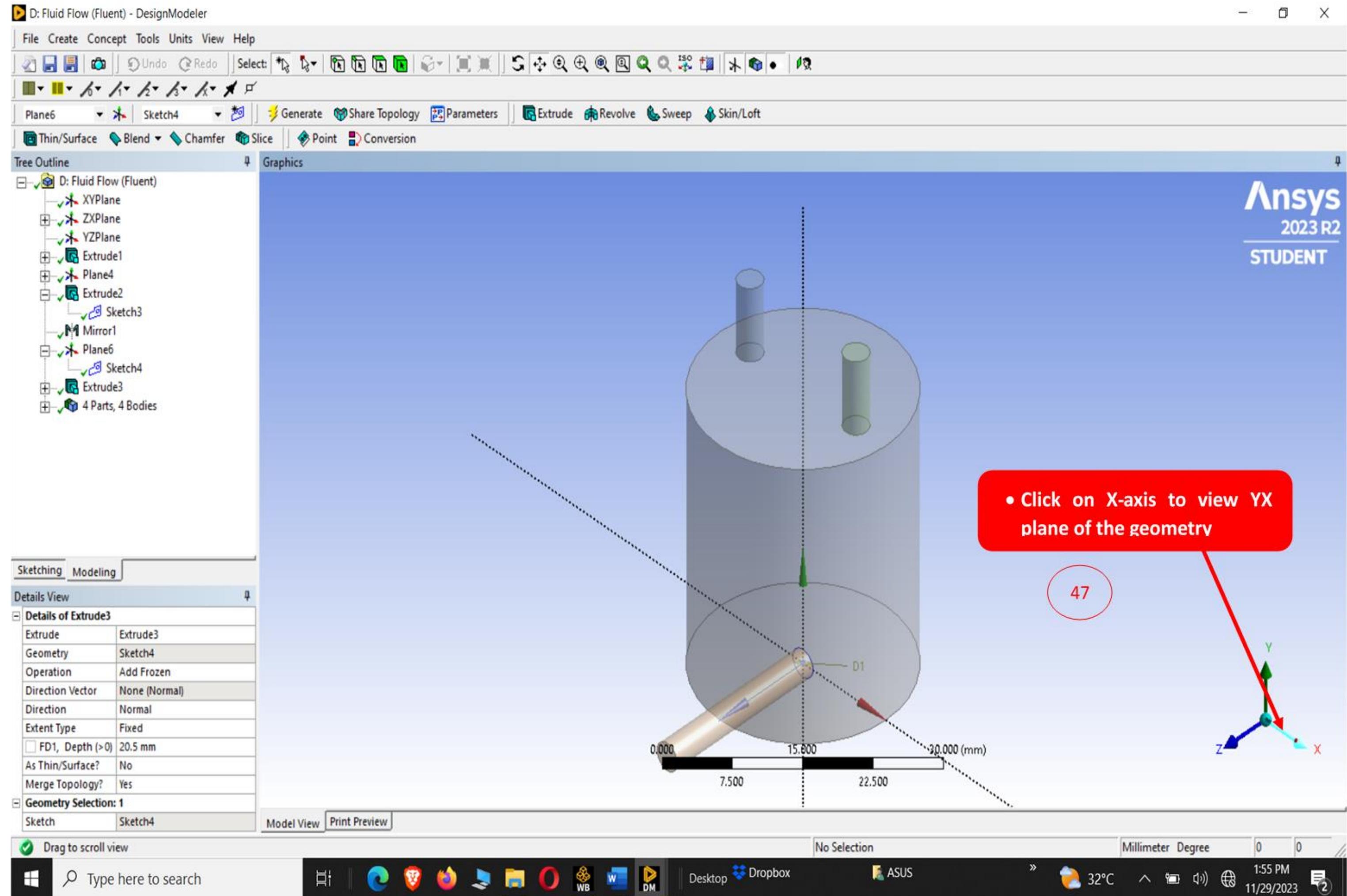
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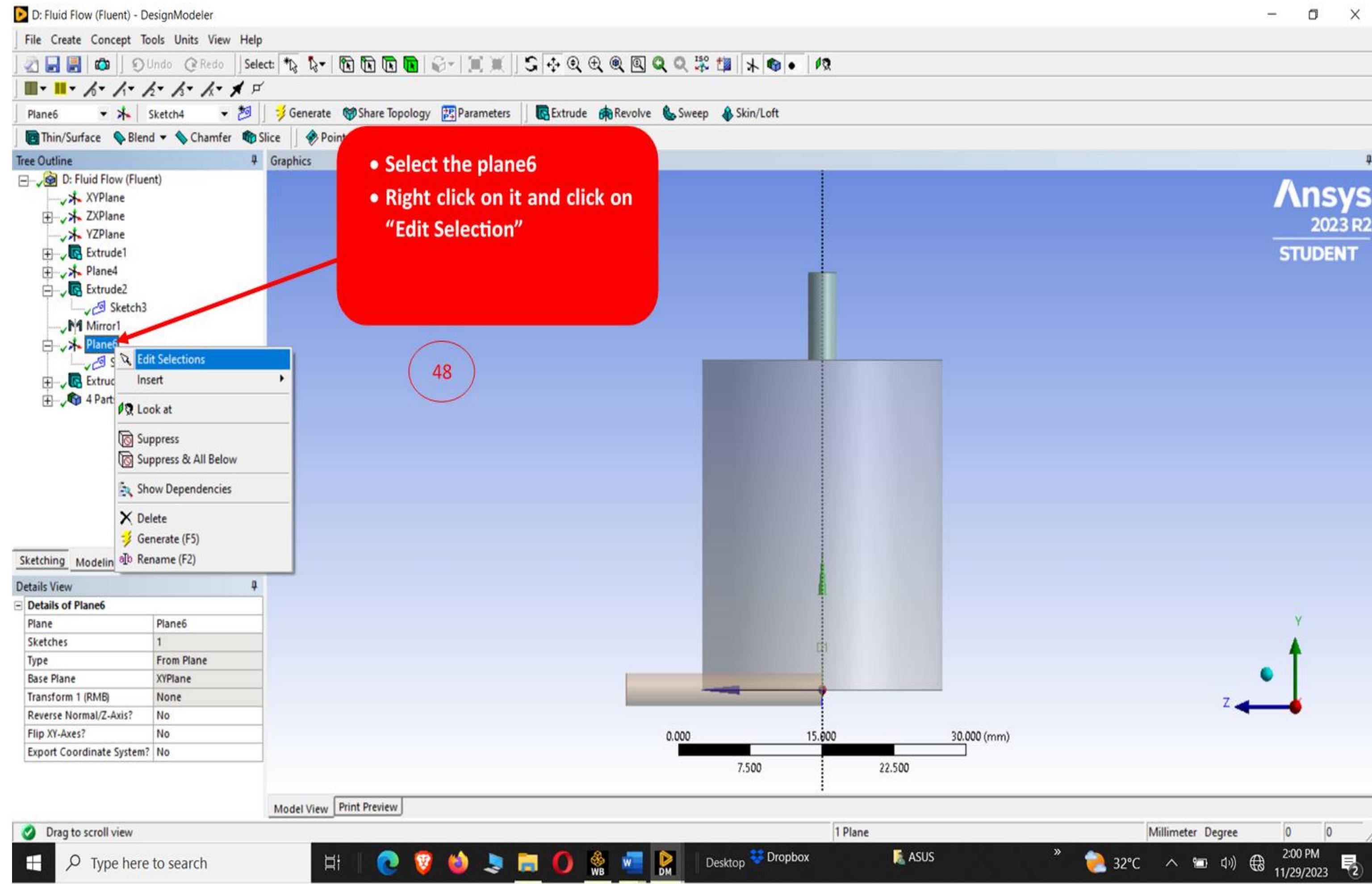
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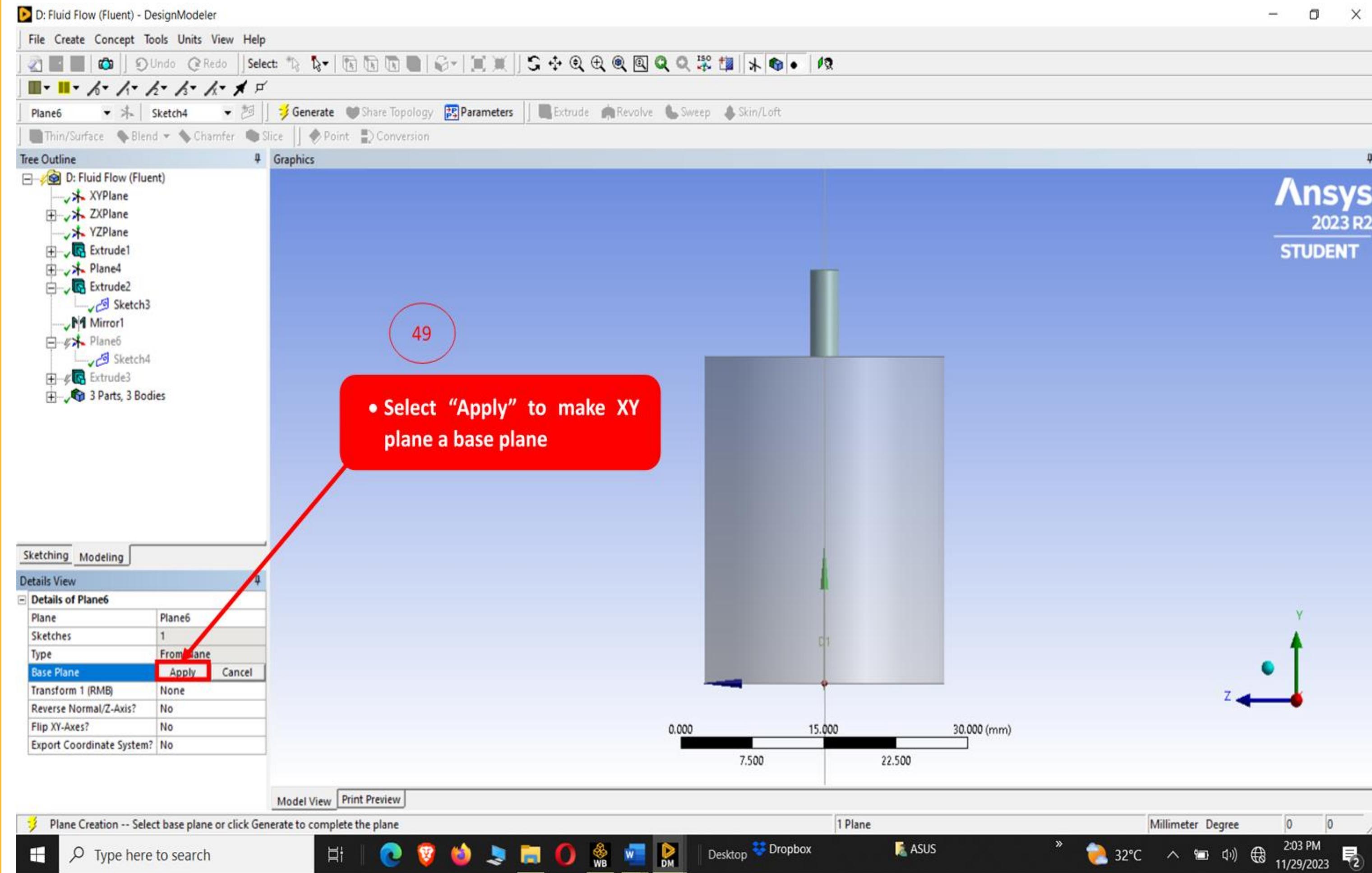
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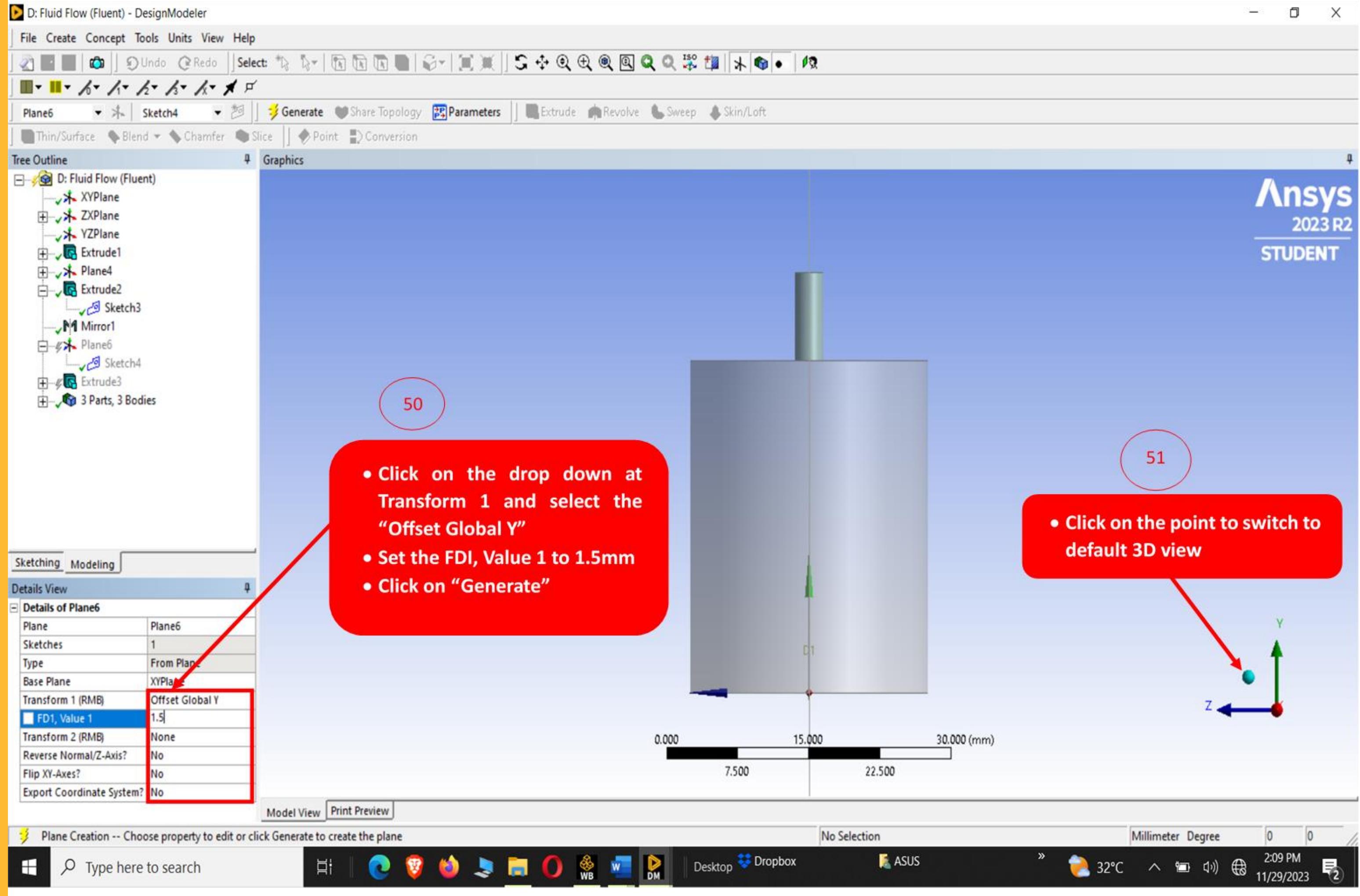
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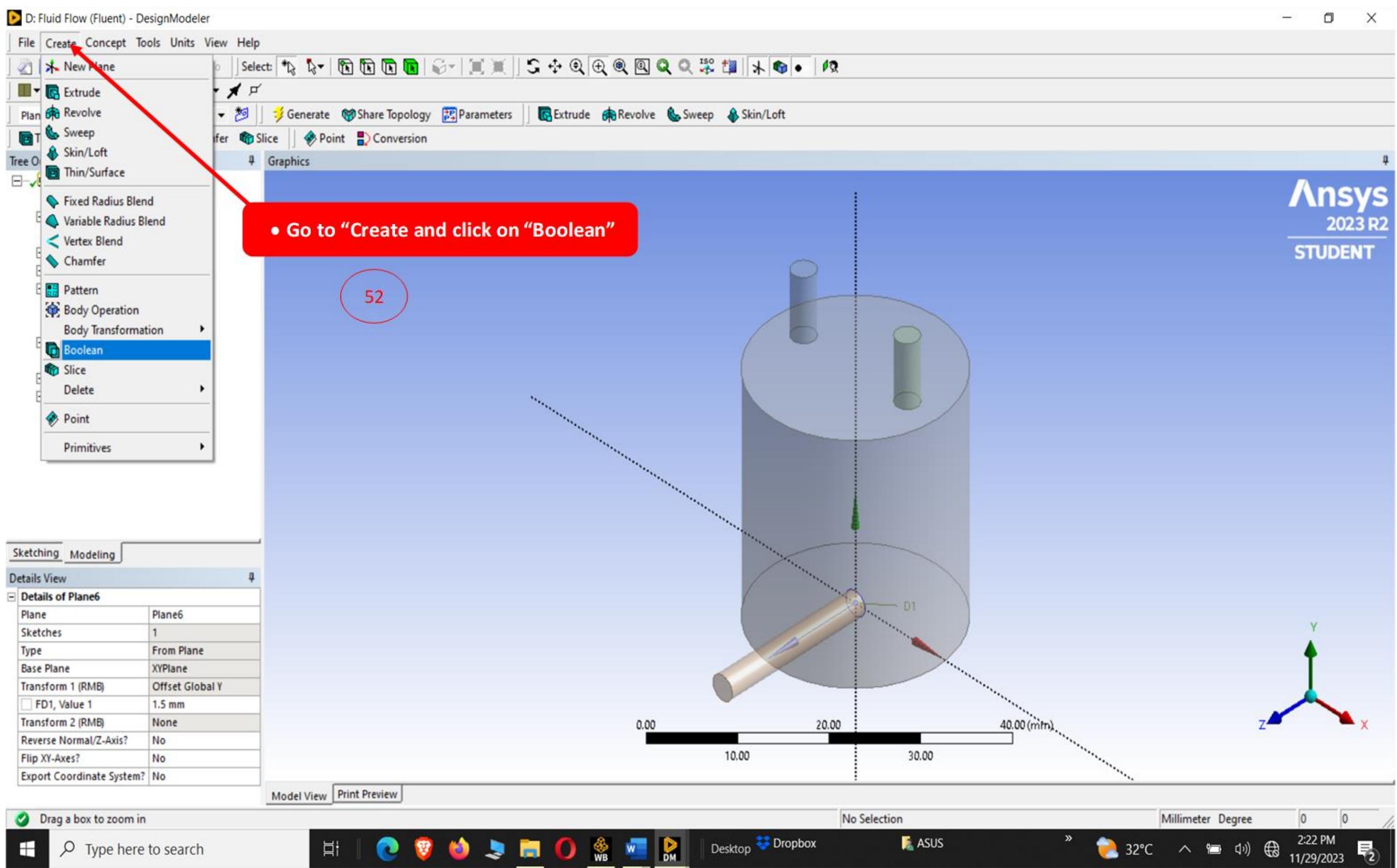
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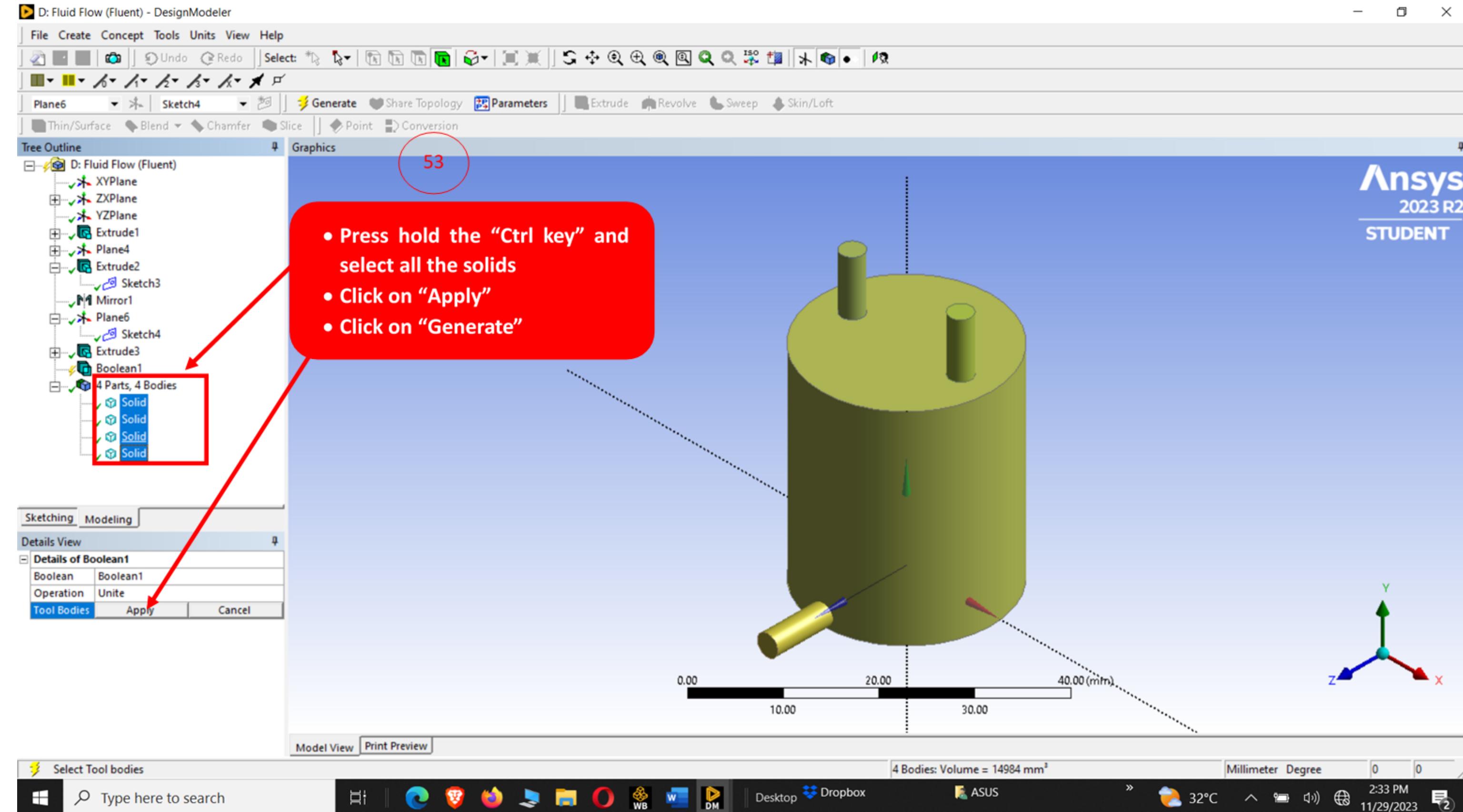
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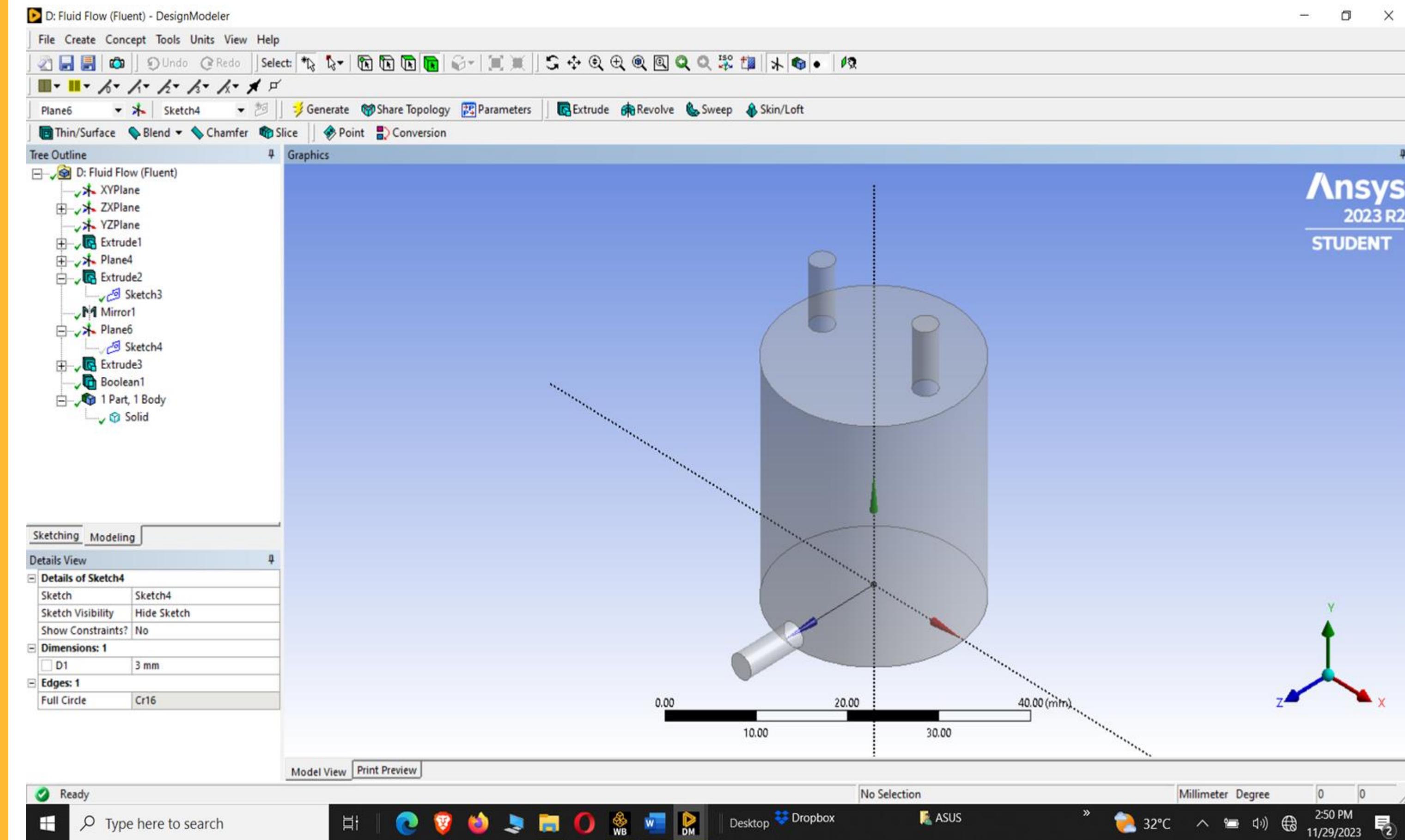
# CREATING THE GEOMETRY



# CREATING THE GEOMETRY



# FINAL GEOMETRY



# SUMMARY

In this first tutorial, you were able to

- Start up your ANSYS Workbench
- Create the geometry for a simple mixing tank using the ANSYS Design Modeler

# SUMMARY

In the next tutorial, you will be able to

- **Generate the mesh of the geometry**
- **Set up the physics of the thermodynamic problem**
- **Input all the boundary conditions**