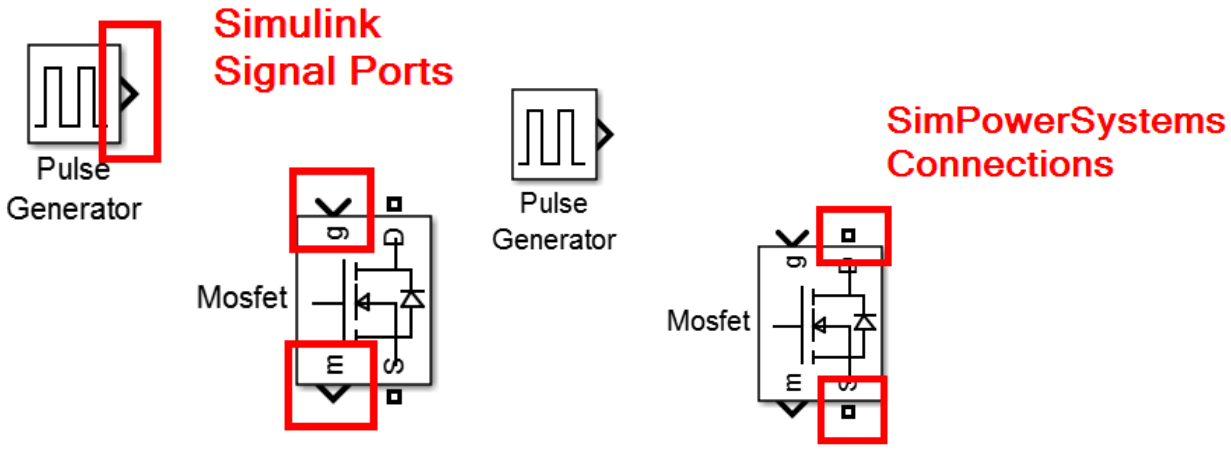
Simulink Signal vs. SimPowerSystems Connection

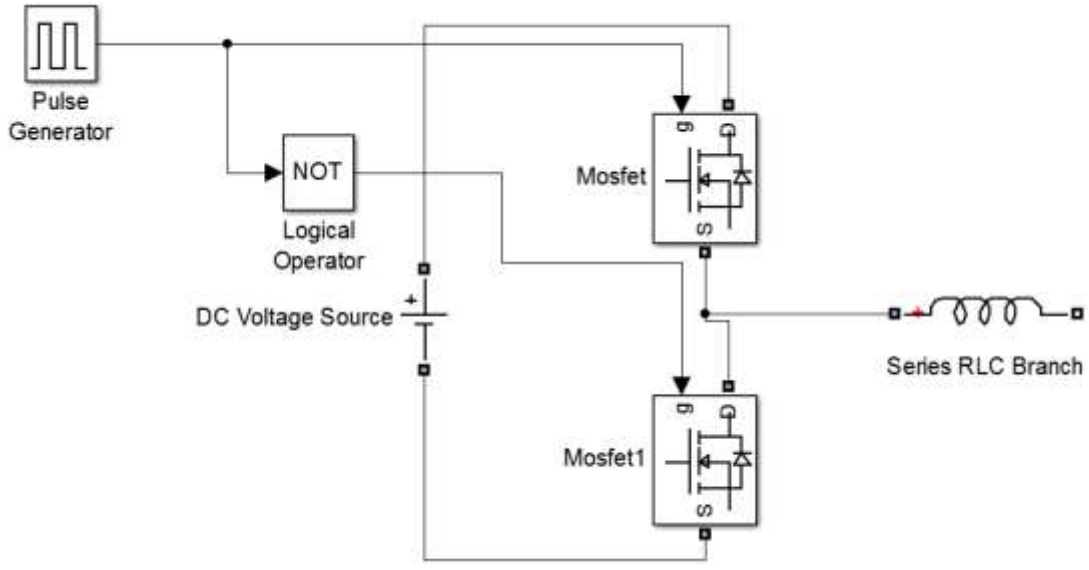
Simulink signals cannot be connected to SimPowerSystems ports. Simulink signals have triangular ports, while SimPowerSystems connections have rectangular ports. Examples of each are shown below.



Creating Subsystems in Simulink

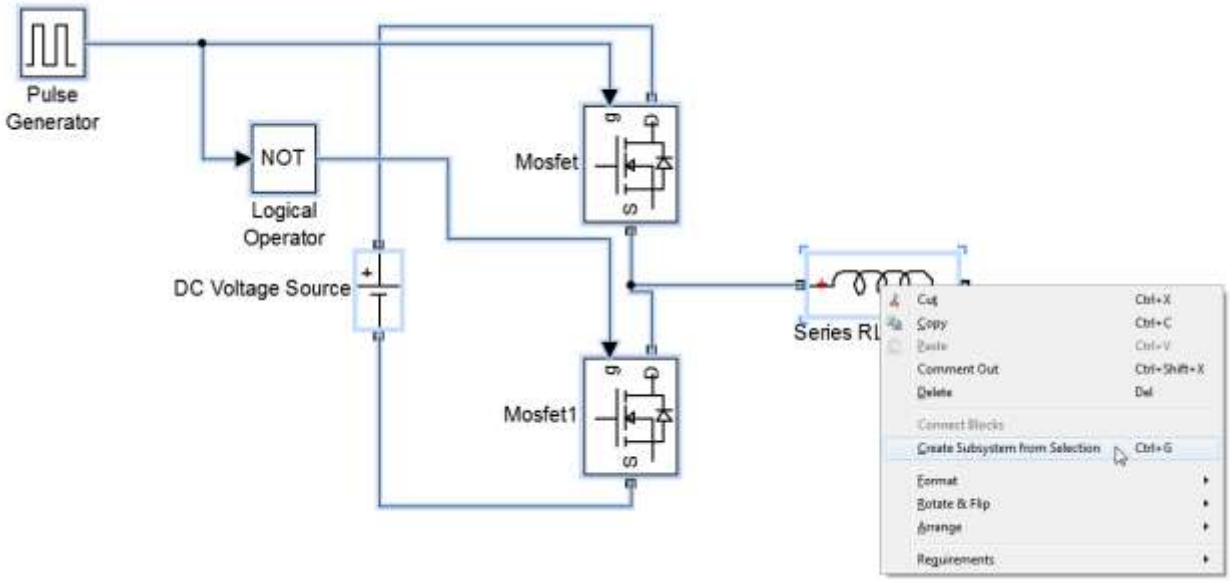
Method 1: Automatic Creation

1. Build the model you want to put into the subsystem.

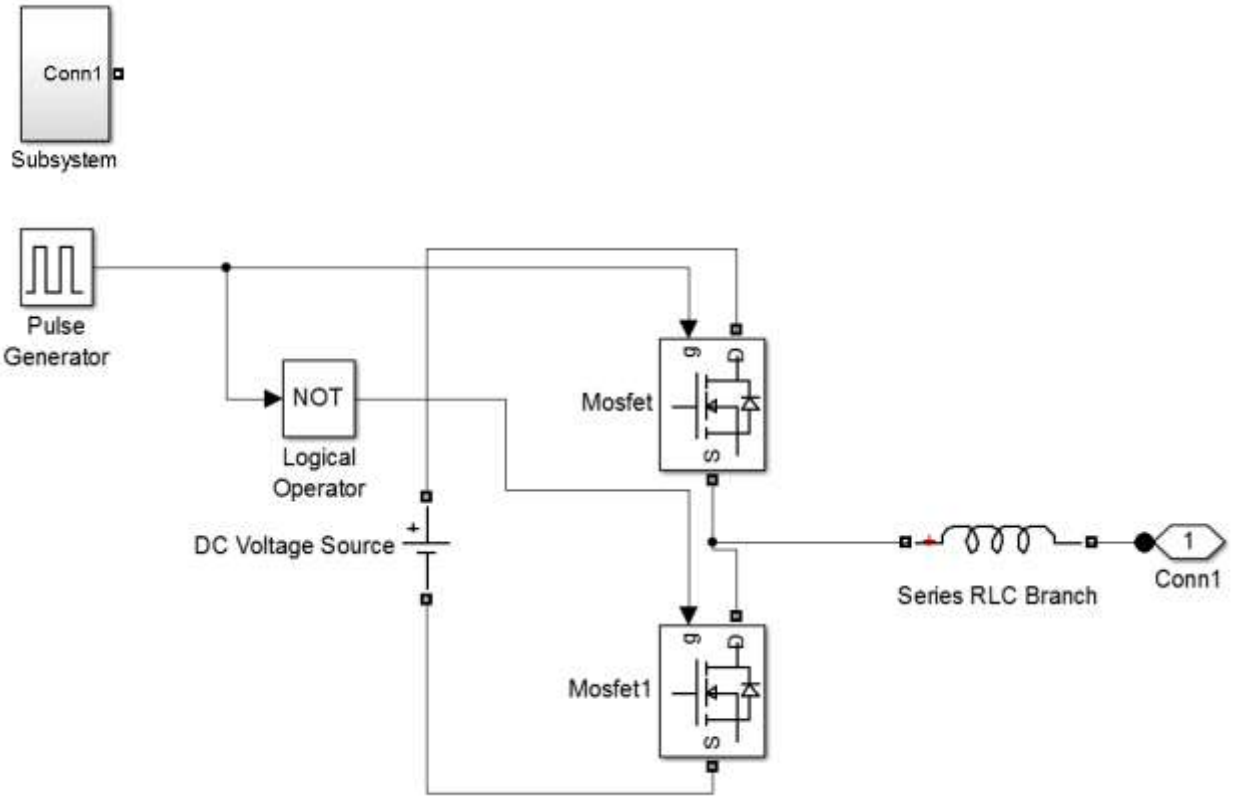


2. Select the blocks in your model.

3. Right click on one of the blocks you have selected, and select Create Subsystem from Selection.

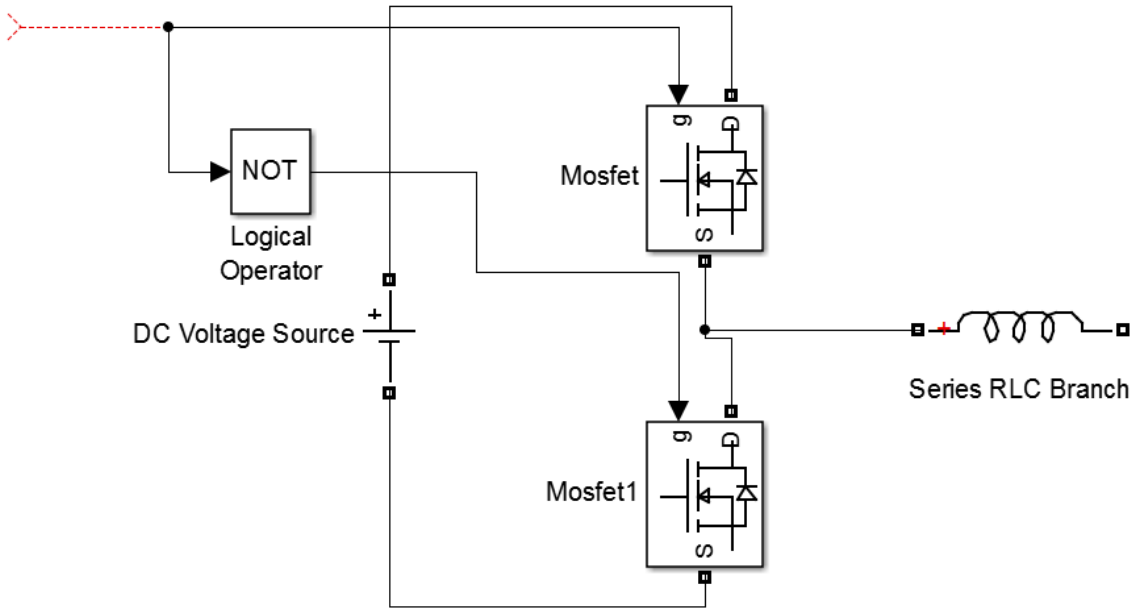


4. Simulink will automatically create a subsystem with the appropriate port connections.

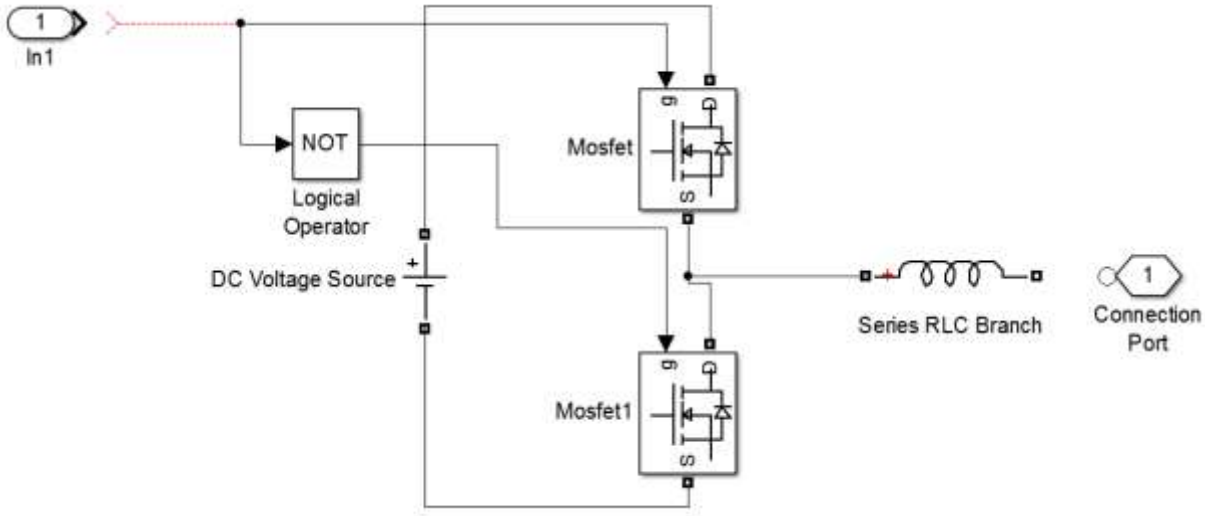


Method 2: Manual Creation

1. Place a subsystem from the library browser into your model.
2. Build your model inside the subsystem.

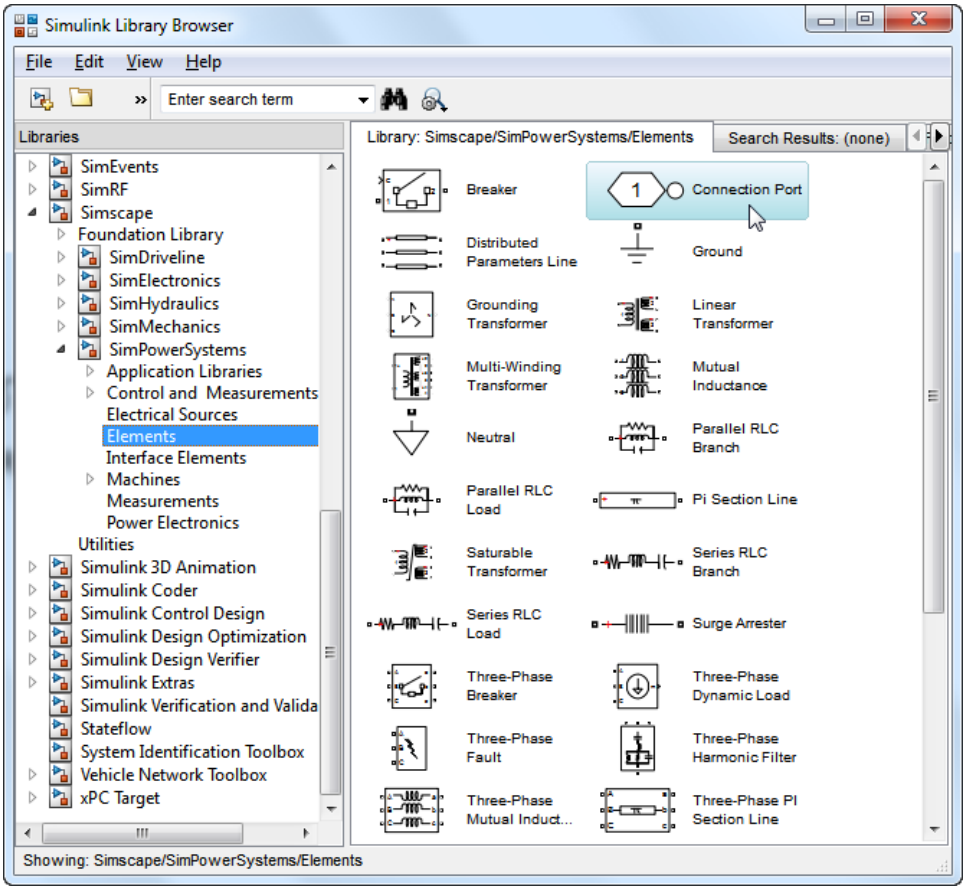


3. Select the appropriate connection port for inputs/outputs.

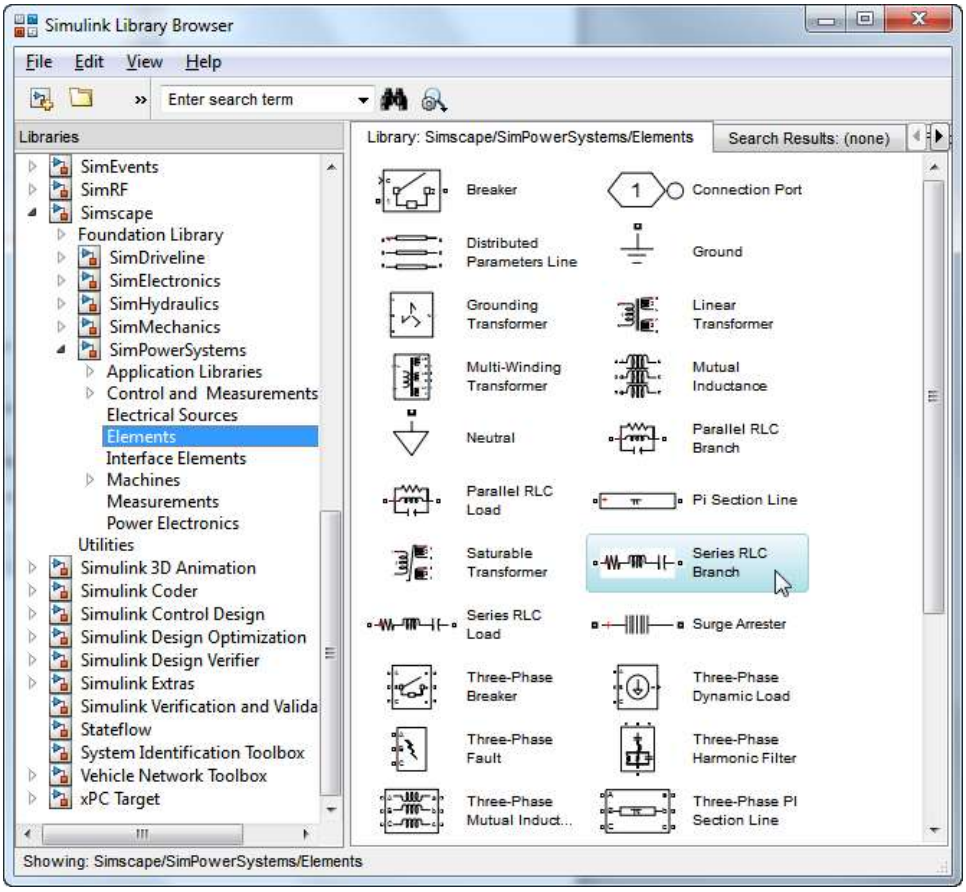


SimPowerSystems Blocks

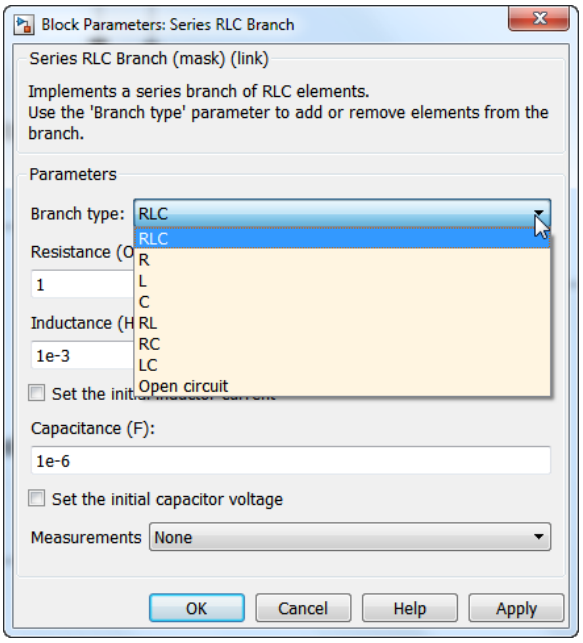
Connection Port: Used for inputs and outputs to subsystems for SimPowerSystems connections



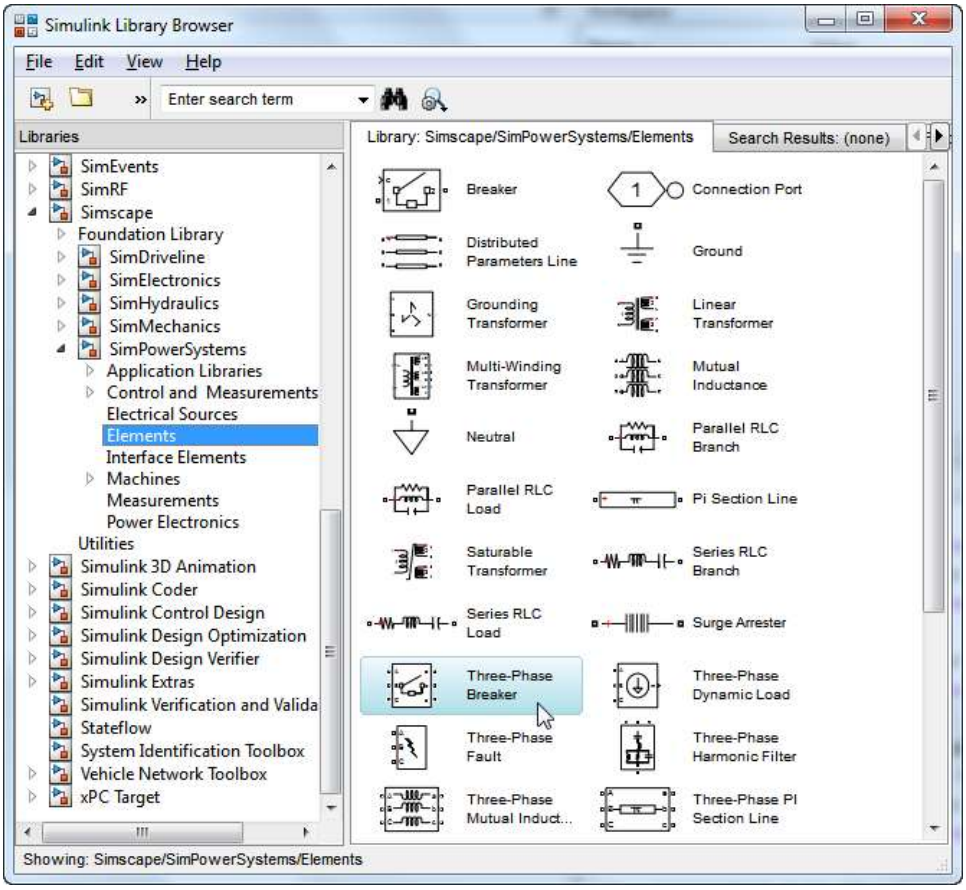
Series RLC Branch: Use for Resistors, Capacitors, and Inductors in your model



Select what type of element you want.

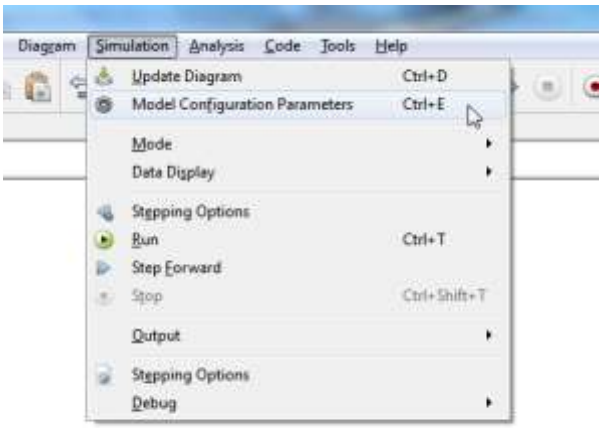


Three Phase Breaker: You can use this to switch between a grid connection to the load and your inverter output



Simulation Settings (sample time)

To adjust the simulation step size, first open the Model Configuration Parameters.



Adjusting the maximum step size will limit the step size on the simulation. You may need to adjust this if your simulation results do not appear to be correct.