**Lab 6: RC Circuits Data Sheet**

Group Number: Name:

**Oscilloscope Exercises**

1. Draw the sine wave that appears on the oscilloscope screen. Measure one period of the wave. Include units.

Period(Tmeasured) =

Frequency (fmeasured) =

Function Generator Frequency (f) =

1. Draw the square wave that appears on the oscilloscope screen. Measure one period of the wave. Include units.

Period (Tmeasured) =

Frequency (fmeasured) =

Function Generator Frequency (f) =

**RC Time Constant**

Resistance (Rmeasured) = Capacitance (C) =

Time Constant (τtheory) = RC = Time Constant (τmeasured) =

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**Post Lab Questions**

1. If you increase the capacitance by 0.02 μF, what will be the new time constant τ?
2. If a 5 kΩ resistor was added in series to the circuit, what would happen to the time constant? Why? If it changes, what would be the new time constant τ?