

## GAS CHROMATOGRAPHY REPORT FORM

### Alkyl Acetates Mixture

Name \_\_\_\_\_ Drawer Number \_\_\_\_\_

Date \_\_\_\_\_ Lab Section \_\_\_\_\_ Instructor \_\_\_\_\_

#### GC Conditions:

Column Liquid Phase		Column Temp. (°C)	
He Flow Rate (mL/min)		Detector Temp. (°C)	
		Injector Temp. (°C)	

#### Standard Mixture of Alkyl Acetates:

Alkyl acetate ROAc	Ethyl acetate EtOAc	Propyl acetate PrOAc	Butyl acetate BuOAc	Pentyl acetate PenOAc
Retention Time, $R_T$ (min.)				
Literature B.pt.				
Peak Area, $A$ (mm <sup>2</sup> )				
Response Factor, $f$ ( $f = A_{EtOAc}/A_{ROAc}$ )				

#### Unknown Mixture of Alkyl Acetates:

Unknown # _____	peak 1	peak 2	peak 3	peak 4
Retention Time, $R_T$ (min.)				
Identity of Peak				
Peak Area, $A$ (mm <sup>2</sup> )				
Corrected Relative Peak Area				
Mole % Component				

NOTE: The unknown sample may not contain 4 peaks. Use as many of these peak designations as required for your sample.

**Question:** What is the relationship between the boiling points and the retention times of the alkyl acetates?

**Citations:**

1.

2.

3.

4.