

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Learning Goal 3.2**

Given a number or set of numbers, identify the prime factorization of each element and use it to find the GCF, LCM, perfect squares or cubes and/or factored form.

**Factor****Multiple****Prime Factorization**

**Example** Find the lowest common multiple (LCM) and the greatest common factor (GCF) of 6 and 15.

**Example** Find the GCF of 220 and 860 without a calculator.

**Example** Find the GCF of 120, 906 and 1400 without a calculator.

**Example** Find the LCM of 21 and 45 without a calculator.

**Example** Find the LCM of 15, 20, 24 and 27 without a calculator.

**Example** Write the following fraction in lowest terms without a calculator.

$$\frac{2145}{1105}$$