Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ HR: \_\_\_\_\_\_

**Homework 5: Prime Factorization**

1. Find the **prime factorization** of each number. Write it with **exponents** if possible.

58 72 40

2. Find the number with the given prime factorization. Show your work.

2 x 2 x 5 x 7 x 11 7 x 11 x 13 x 17

3. There are 32 students in the class. How many ways can the class be divided into equal groups with equal number of students? Show all different ways.