

Last name \_\_\_\_\_

First name \_\_\_\_\_

LARSON—MATH 750—HOMEWORK WORKSHEET 02  
Poset Basics

1. Brualdi, p.122 #37
2. Brualdi, p.124 #54
3. Write a clear complete proof that for a fixed positive integer  $n$ , the maximum value of the expression  $\binom{n}{k}$  for integer  $k$  occurs when  $k = \lfloor \frac{n}{2} \rfloor$ .