

Math 2303
Summer 2008
Homework Bonus Part 2
The Symmetry Group for a Plus Sign

1. Is the $*$ operation closed?
2. Give an example that illustrates the associative property for this system. Assume this operation is associative without checking every combination of operands.
3. Is there an identity element for this system? If so, what is it?
4. List each element in the system and its inverse. Does every element have an inverse?
5. Is this system a group? _____
6. Is this system a commutative group? _____