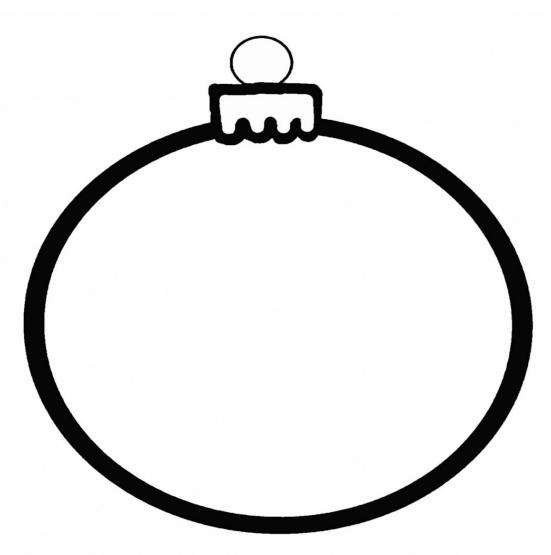
## **Holiday Ornament Design**

Every holiday season, Murano Glass awards a contract for a new yearly millefiori glass ornament design. You and your team are competing for a contract to be awarded by Murano Glass Company. The ornament design must meet the following criteria in order to be considered for the competition. Create a replication of the design you and your team plan to submit.

## **Ornament Design**

Decorate the ornament with objects meeting the following criteria:



5/6 of the objects are polygons 50% of the objects are of the same color ¼ of the objects are squares 1/3 of the objects are triangles 25% of the objects are stars

Record the mathematics used to satisfy the requirements of the ornament design. Be prepared to share your creation with the rest of the group.

If polygons are worth \$1.50 and non-polygons are worth \$7.25, how valuable is your ornament?

What would make the ornament design more valuable?

What would be a way to model the price of any given ornament?

What are some other ways we could model the price?

What would be the greatest amount of decorations you think you could possibly put on the ornament? What tools may help you figure this out?

How valuable might this ornament be? How might you figure that out? Be ready to explain.