

## Nets of Three-Dimensional Figures on the ISEE All Levels

LESSON GOAL: Identify the correct foldout net of a three-dimensional figure.



*Helpful Tip:* Ignore all shapes that you can't see on the cube (the double-sided arrow, the gray square and the white circle) and only focus on the ones you can.

**Solution:** There's actually very little to do here! The nets all have the same shape so you don't have to worry about whether they create a cube when folded (they must!). Let's use the process of elimination.

STEP 1: Find the picture that has the fewest *lines of symmetry* and describe how it behaves. In this case, it is the arrow, and *it points away from the black circle*. Looking at the answer choices, we see that is true for A) and for D). (In B) and C), the arrow points away from the gray square.)



STEP 2: Now that we've eliminated two answers, let's compare the remaining two, still focusing on the arrow. In A), the arrow points to the diamond, while in D), it points to the blank circle. On the cube above, we don't know what the arrow points to, but we know that it is NOT the diamond because no shape repeats twice. So the correct answer must be D). (Another way of looking at it: the circle and diamond are next to each other, but in A) and B) they will end up on opposite sides of the cube.)