similar figures, there is a relationship between sides that is based on multiplication or division but not on addition or subtraction. Highlight the many ways we can talk about how corresponding sides are related — for example, 5 times greater, multiply each side by $\frac{1}{2}$, multiply by a factor of 3, etc. (Note: If students are focusing only on angle measures (not corresponding sides) and conclude that two figures with congruent angles are always similar, refer them to two very different rectangles in the Fun House, such as windows F and P. These rectangles have congruent angles (90°) but are not similar. Ask students if these rectangles are shaped the same way. Then have them measure the corresponding sides to see if there is a consistent multiplicative relationship among all corresponding sides.)



5. Review the complete definition for similarity, explaining that it involves more than congruent angle measurements. For figures to be similar, there must also be an equivalent relationship among corresponding sides. Have students work on creating a complete definition of what it means for two figures to be similar. Have groups brainstorm and write their ideas down on paper. Have groups share ideas and write a class definition on the board or on chart paper that can be posted in the classroom. Here is one suggestion:

If two figures are similar, then...

- Their corresponding angles are congruent
- The ratios formed by comparing the lengths of corresponding sides will all be equivalent
- Assign the second Think Deeply question. This question asks students to explain how two figures are mathematically similar; they must give one example and one non-example. This question is a good one to use to assess student understanding of similarity.