3-1 Solve It!

Try visualizing how the bookcase looks in two dimensions.

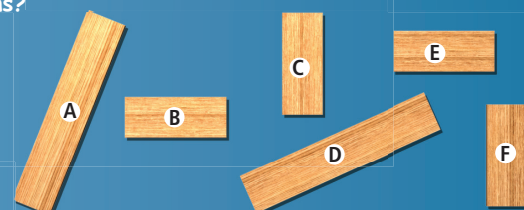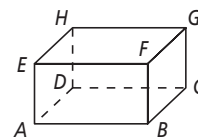**Getting Ready!**

You want to assemble a bookcase. You have all the pieces, but you misplaced the instructions that came with the box. How would you write the instructions?
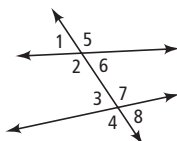
3-1 Lesson Quiz

1. Name a plane parallel to plane *ABCD*.

2. Name a pair of same-side interior angles in the figure below.

3. In the figure above, are ∠1 and ∠8 alternate interior angles, same-side interior angles, corresponding angles, or alternate exterior angles?

4. Do you UNDERSTAND? Why are alternate interior angles and alternate exterior angles both called "alternate"?

Answers

Solve It!

Pieces A and D are the sides of the bookcase. Pieces B, C, E, and F are the shelves; instructions may vary. Sample: Arrange pieces A and D so that a pair of flat faces are across from each other, and each piece stands upright with its long edges ⊥ to the floor. Place piece B flat on the floor between A and D so that its long edge is ⊥ to the long edges of both A and D. Attach one short edge of B to each of pieces A and D. Place piece C in between and at the top of A and D so that its long edge is ⊥ to the long edges of both A and D. Attach one short edge of C to each of pieces A and D. Attach pieces E and F in a similar manner in between pieces B and C.

Lesson Quiz

1. plane *EFGH*
2. ∠2 and ∠3 or ∠6 and ∠7
3. alternate exterior angles
4. Both alternate interior and alternate exterior angle pairs lie on opposite sides of the transversal.