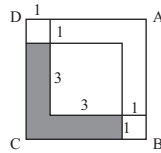


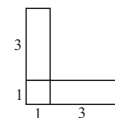
Figure  $ABCD$  is a square. Inside this square three smaller squares are drawn with side lengths as labeled. the area of the shaded L-shaped region is



- (A) 7    (B) 10    (C) 12.5    (D) 14    (E) 15

**2000 AMC 8, Problem #6—**  
**“Look at the shade area as two rectangles.”**

**Solution**



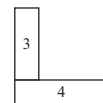
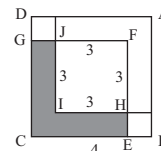
**Answer (A):** The L-shaped region is made up of two rectangles with area  $3 \times 1 = 3$  plus the corner square with area  $1 \times 1 = 1$ , so the area of the L-shaped figure is  $2 \times 3 + 1 = 7$ .

OR

Square  $FECG$ — square  $FHIJ = 4 \times 4 - 3 \times 3 = 16 - 9 = 7$ .

OR

The L-shaped region can be decomposed into a  $4 \times 1$  rectangle and a  $3 \times 1$  rectangle. So the total area is 7.



**Difficulty:** Medium

**NCTM Standard:** Geometry Standard for Grades 68: understand relationships among the angles, side lengths, perimeters, areas, and volumes of similar objects.

**Mathworld.com Classification:** Geometry > Plane Geometry > Miscellaneous Plane Geometry > Area