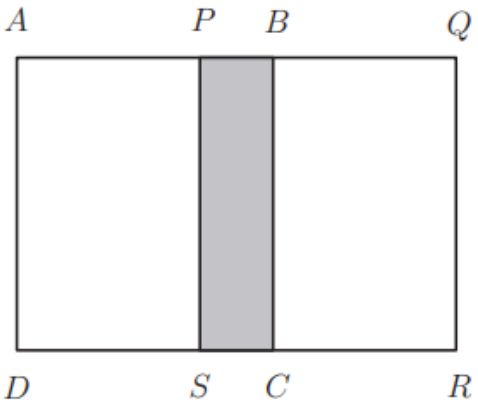
1998 Q13

13. What is the ratio of the area of the shaded square to the area of the large square? (The figure is drawn to scale.)

(A) $\frac{1}{6}$ **(B)** $\frac{1}{7}$ **(C)** $\frac{1}{8}$ **(D)** $\frac{1}{12}$ **(E)** $\frac{1}{16}$

2011 Q13

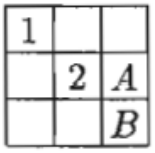
13. Two congruent squares, $ABCD$ and $PQRS$, have side length 15. They overlap to form the 15 by 25 rectangle $AQRD$ shown. What percent of the area of rectangle $AQRD$ is shaded?



(A) 15 **(B)** 18 **(C)** 20 **(D)** 24 **(E)** 25

1993 Q14

14. The nine squares in the table shown are to be filled so that every row and every column contains each of the numbers $1, 2, 3$. Then $A + B =$



(A) 2 **(B)** 3 **(C)** 4 **(D)** 5 **(E)** 6

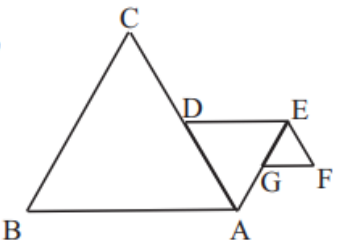
2004 Q14

14. What is the area enclosed by the geoboard quadrilateral below?

(A) 15 **(B)** $18\frac{1}{2}$ **(C)** $22\frac{1}{2}$ **(D)** 27 **(E)** 41

2000 Q15

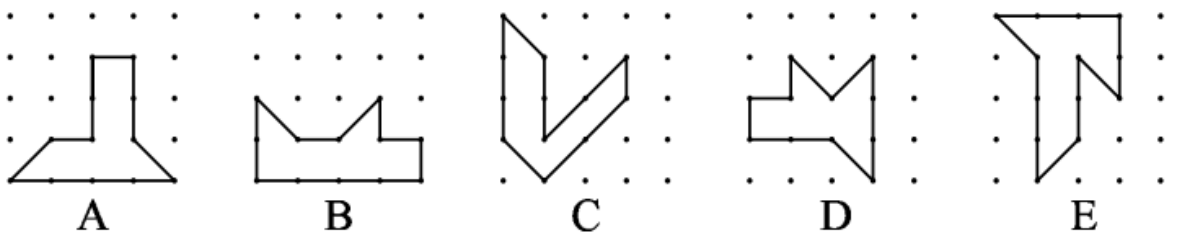
15. Triangle ABC, ADE, and EFG are all equilateral. Points D and G are midpoints of $\overline{AC}$ and $\overline{AE}$, respectively. If $AB = 4$, what is the perimeter of figure $ABCDEFG$?



(A) 12 **(B)** 13 **(C)** 15 **(D)** 18 **(E)** 21

2002 Q15

15. Which of the following polygons has the largest area?



(A) A **(B)** B **(C)** C **(D)** D **(E)** E

7 / 7

2004 Q15

15. Thirteen black and six white hexagonal tiles were used to create the figure below. If a new figure is created by attaching a border of white tiles with the same size and shape as the others, what will be the difference between the total number of white tiles and the total number of black tiles in the new figure?

(A) 5 **(B)** 7 **(C)** 11 **(D)** 12 **(E)** 18