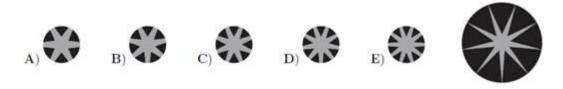
Math Kangaroo 2014 Sample Questions - Levels 3 & 4

1. Which small figure could be the central part of the larger figure with the star?



2. Jacky wants to place the digit 3 somewhere in the number 2014. Where should she place the digit 3 to make the resulting five-digit number as small as possible?

A) in front of 2014B) between the 2 and the 0C) between the 0 and the 1D) between the 1 and the 4E) behind 2014

10. There were some pieces of candy in a bowl. Sally took half of the pieces of candy. Then Tom took half of the pieces left in the bowl. After that Clara took half of the remaining pieces. In the end there were 6 pieces of candy in the bowl. How many pieces of candy were in the bowl at the beginning?

A) 12 B) 18 C) 20 D) 24 E) 48

11. Which tile must be added to the picture so that the total light gray area is the same size as the total dark grey area?





19. Eve arranged cards in a line as shown below. In one move, Eve can switch the places of any two cards. What is the smallest number of moves Eve needs to make to get the word KANGAROO?



20. We are making a sequence of triangles out of diamonds. The first three steps are shown. In each step a line of diamonds is added to the bottom. In the bottom line the two outside diamonds, one on each side, are white. All the other diamonds in the triangle are black. How many black diamonds will the figure have in step 6?

