1. The point \((3, -2)\) is rotated 90° about the origin and then dilated by a scale factor of 4. What are the coordinates of the resulting image?
   1) \((-12, 8)\)
   2) \((12, -8)\)
   3) \((8, 12)\)
   4) \((-8, -12)\)

2. If the coordinates of \(P\) are \((-2, 7)\), what are the coordinates of \((D_2 \circ r_{y=-4})(P)\)?
   1) \((4, -14)\)
   2) \((-14, 4)\)
   3) \((-4, 14)\)
   4) \((14, -4)\)

3. If the coordinates of point \(A\) are \((-2, 3)\), what is the image of \(A\) under \(r_{y-axis} \circ D_3\)?
   1) \((-6, -9)\)
   2) \((9, -6)\)
   3) \((5, 6)\)
   4) \((6, 9)\)

4. If point \(A\) has coordinates \((-3, 4)\), what are the coordinates of \(A'\), the image of \(A\) under \(r_{y-axis} \circ D_2\)?
   1) II, only
   2) I and II
   3) II and III
   4) II, III, and IV

5. Find the coordinates of the image of \((-3, -4)\) under the transformation \(D_2 \circ R_{90°}\).
G.SRT.A.2: Compositions of Transformations 1a
Answer Section

1  ANS:  3  
    (3,−2) → (2,3) → (8,12)  
    REF:  011126ge

2  ANS:  4  
    REF:  019723siii

3  ANS:  4  
    After the dilation, the coordinates are (−6,9). After the reflection, the coordinates are (6,9).  
    REF:  010520b

4  ANS:  
    (6,8)  
    REF:  080010siii

5  ANS:  
    (8,−6)  
    REF:  089340siii

6  ANS:  1  
    After the translation, the coordinates are $A'(−1,5)$ and $B'(3,4)$. After the dilation, the coordinates are $A''(−2,10)$ and $B''(6,8)$.  
    REF:  fall0823ge

7  ANS:  1  
    REF:  011002b

8  ANS:  1  
    NYSED accepts either (1) or (3) as a correct answer. Statement III is not true if $A$, $B$, $A'$ and $B'$ are collinear.  
    REF:  061714geo