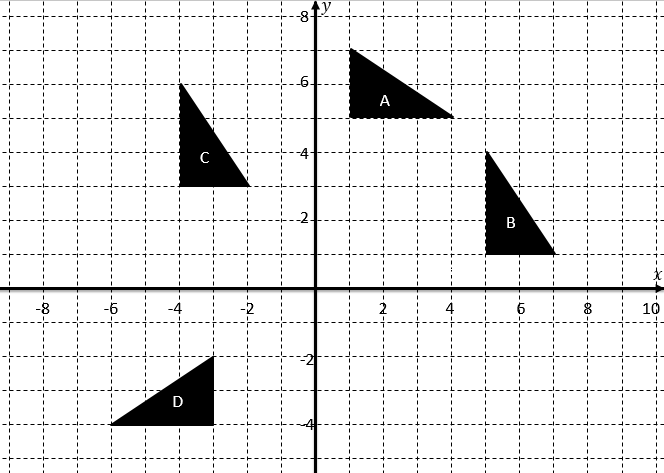
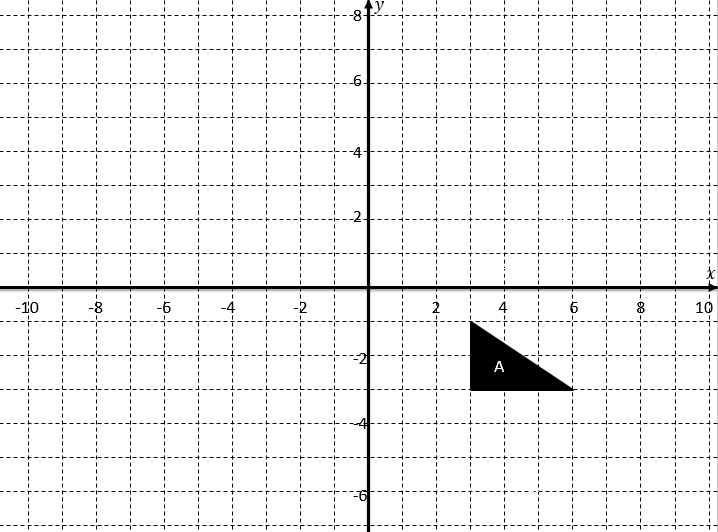
**QQQ – Year 7 Transformations**

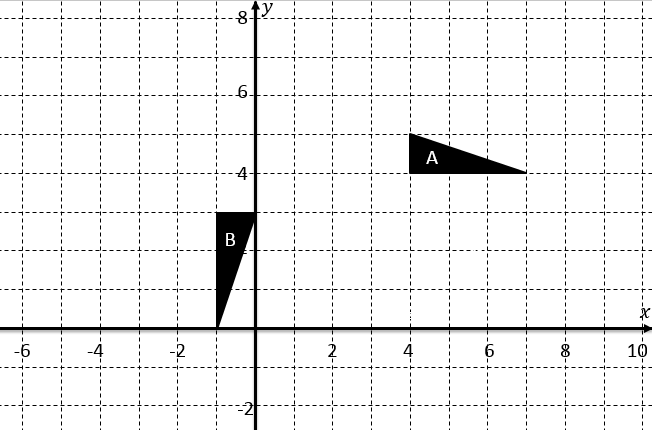
Name Score \_\_\_\_\_\_\_\_ / 9 Award \_\_\_\_\_\_\_\_\_\_\_

1. Using the diagram below, describe the single transformation from.
2. A to B \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (1)
3. B to C \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (1)
4. C to D \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (1)
5. A to D (note that decimal coordinates are permitted)  
     
    \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (1)



1. Carry out the following transformations:
   1. Rotate the shape A about the point . Label it B. (1)
   2. Rotate the shape A anticlockwise about the origin. Label it C. (1)
   3. Reflect the shape in the line . Label it D. (1)



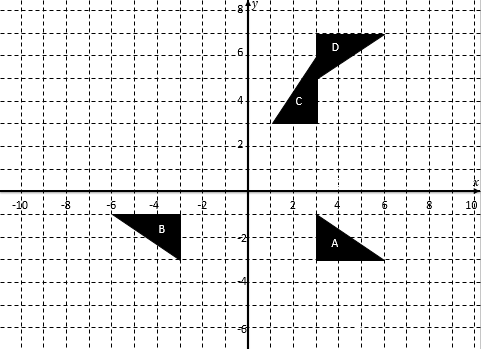
1. Identify the centre of rotation as A is rotated to give B. (1)  
     
   

Centre of rotation: ( , ) 

1. An object is rotated about the point followed by about the point . Describe the **single** transformation that has the same effect as this combined transformation. (1)  
     
     
   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
     
     
   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
     
     
     
   *(Awards: 5+ Bronze, 6+ Silver, 8+ Gold, 9 Platinum)*

Solutions

1. A) Reflection in the line   
   B) A translation by   
   C) A rotation anticlockwise about/around the origin (or (0,0)).



1. (1,6)
2. Translation by .