Unit 3.4 Worksheet Answers

1.
   a. $P'(-9,6), P''(-3,2)$
   b. $P'(8,16), P''(-8,16)$
   c. $P'(1,2), P''(\frac{1}{2}, 1)$
   d. $P'(2,-1), P''(-2,1)$
2. $C'(3,0)\ D'(2,-6), C''(1,0)D''(\frac{2}{3},-2)$
3. $C'(6,-12)\ D'(4,0), C''(8,-12)D''(6,0)$
4. $P'(3,6)\ Q'(9,0)R'(6,-3), P''(-6,3)Q''(0,9)R''(3,6)$
5. $P'(2,6)\ Q'(6,2)R'(4,0), P''(1,3)Q''(3,1)R''(2,0)$
6. Transformation 1: Dilate by a factor of 2 centered at the origin
   Transformation 2: Reflect over line x = 1
7. Transformation 1: Rotate 90° CW about the origin
   Transformation 2: Dilate by a factor of $\frac{1}{3}$ centered at the origin
8. $A'(-3.4,3.4), A''(-3.4,0.6)$, Sum = -2.8
9. $A'(2,8), A''(-1,6)$, Sum = 5
10. $A'(6,-5), A''(3,-2.5)$, Sum = 0.5
11. $A'(4,-2), A''(-2,-6)$, Sum = -8
12. $A'(-5,-9), A''(-1,-3)$, Sum = -14
13. $A'(-2,6), A''(4,3)$, Sum = 7