Practice worksheet | Geometry and transformations

Sequences of steps and decisions

Name: _____ Date: _____

6 questions | 15 marks

1. Start at $(-1, 2)$, translate by $(3, -1)$, then enlarge by factor 2 from the origin. [2 marks]

2. From $(0, 0)$, repeat “move 2 units right” four times. Find the final point. [2 marks]

3. Complete the decision: for segment length L, increase radius r if ___. [2 marks]

4. Enlarge $P(1,1)$ by factor 3 from the origin, then translate by $(2,0)$. Find the image. [2 marks]

5. Describe a finite compass algorithm to mark a regular hexagon on a circle. [4 marks]

6. An algorithm says “if four sides are equal, the quadrilateral is a square”. Give a counterexample and repair the decision. [3 marks]