

Homework Set 3
Transformations and Symmetry in Geometry

Read sections 5.4, 6.1, 6.3, and 6.6 in Thomas Sibley (2015) *Thinking Geometrically* (TG) before solving the exercises in this section. Type up each exercise and its solution in L^AT_EX and turn in a paper copy of the pdf. Figures may be drawn by hand.

1. TG 5.4.9 (page 232)
2. TG 5.4.20 (page 234)
3. TG 6.1.5 (page 265)
4. TG 6.1.11(a) (page 266)
5. TG 6.3.5 (page 282)
6. Use Richardson's method (TG example 6.51, page 308) to estimate the fractal dimension of Hagrid's beard from the picture on page 2.

