Goal: Label angles in the given figures so that they have the relationships described in the tables.

Problem 1: 2 parallel lines

| Angles | Relationship |
| :---: | :---: |
| 1,2 | Alternate Interior angles |
| 3,4 | Alternate Exterior angles |
| 6,7 | Alternate Exterior angles |
| 6,8 | Corresponding angles |
| 1,3 | Vertical angles |
| 2,5 | Same-side Interior angles |
| 2,8 | Linear Pair |

*Linear Pair: synonym for Supplementary Angles
Problem 2: 3 intersecting lines
*Given: Angles 1 and 4 are interior angles of the triangle.

| Angles | Relationship |
| :---: | :---: |
| 3,1 | Alternate Interior angles |
| 1,10 | Same-side interior |
| 5,1 | Vertical angles |
| 2,10 | Linear Pair |
| 5,2 | Alternate exterior angles |
| 10,11 | Corresponding angles |
| 11,1 | Corresponding angles |
| 10,12 | Corresponding angles |
| 9,6 | Vertical angles |
| 9,11 | Alternate exterior angles |
| 7,3 | Vertical angles |
| 2,3 | Same-side interior |
| 8,3 |  |

Problem 1 Sketchpad:


Problem 2 Sketchpad:


Final answers:



