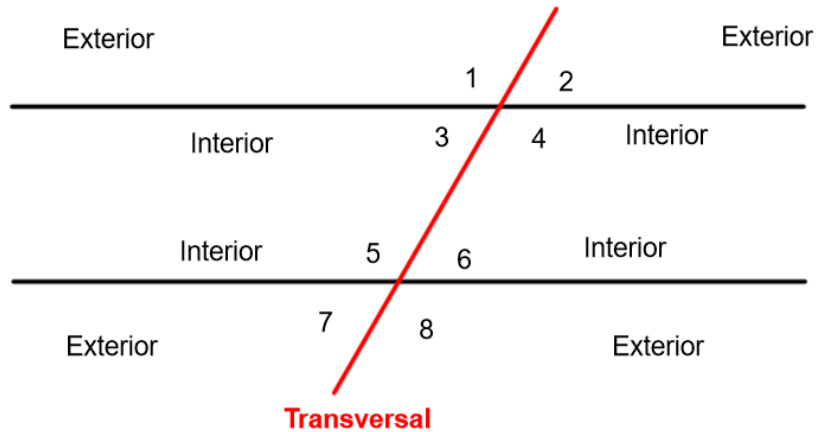Geometry – Parallel Lines and a Transversal

Objectives:
- Identify pairs of angles: corresponding angles, vertically opposite, alternate interior, alternate expterior, same side interior and straight angles.
- Solve equations based on properties of parallel lines and a transversal.

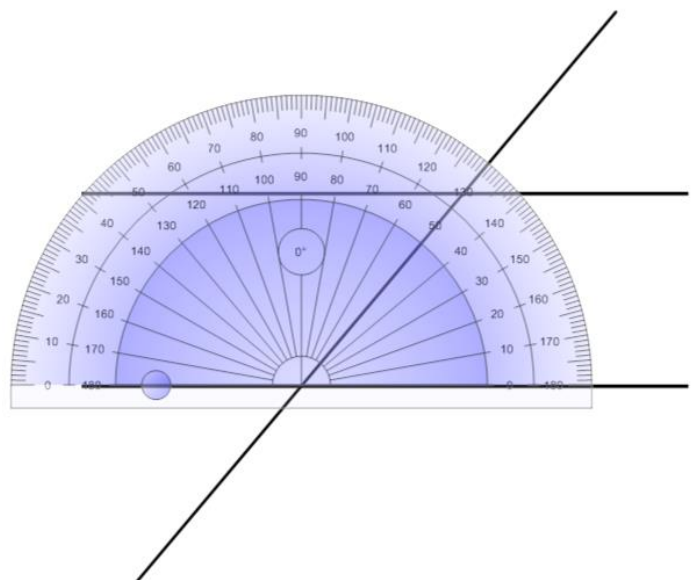Exterior   Exterior

                                                        1   2

Interior   3   4   Interior

Interior   5   6   Interior

                                            7   8

Exterior   Exterior

Transversal

Corresponding Angle Pairs: Alternate Interior Angle Pairs:
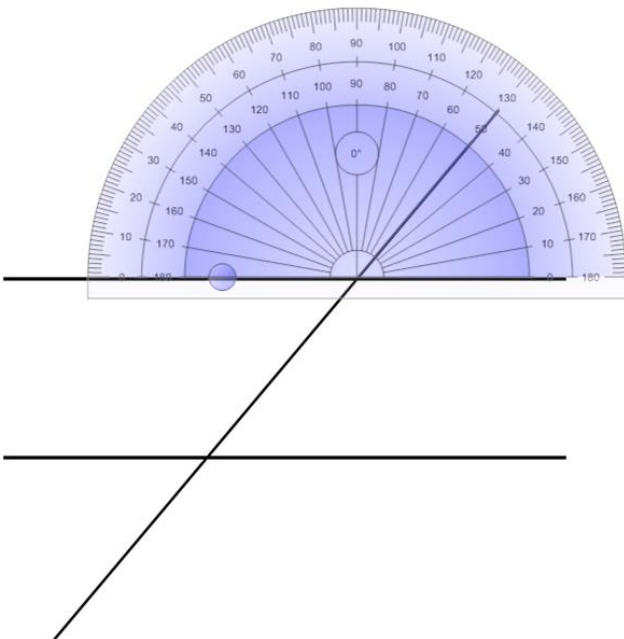
Alternate Exterior Angle Pairs: Same Side Interior Angle Pairs:
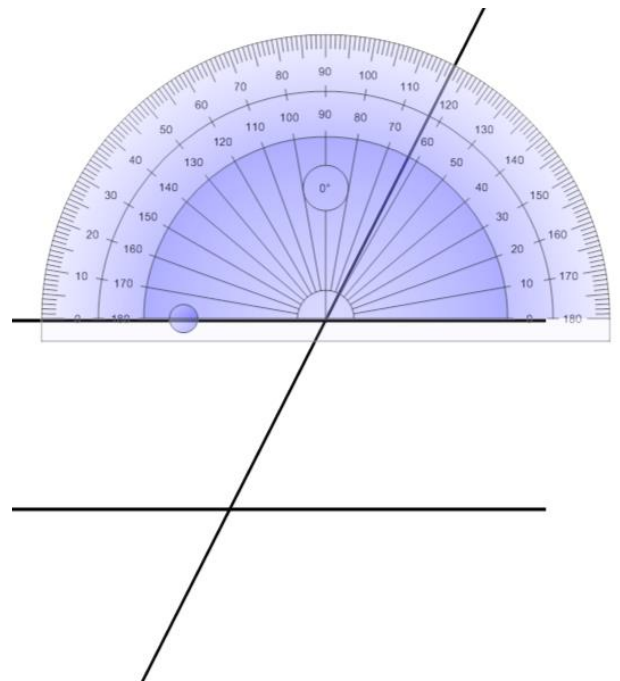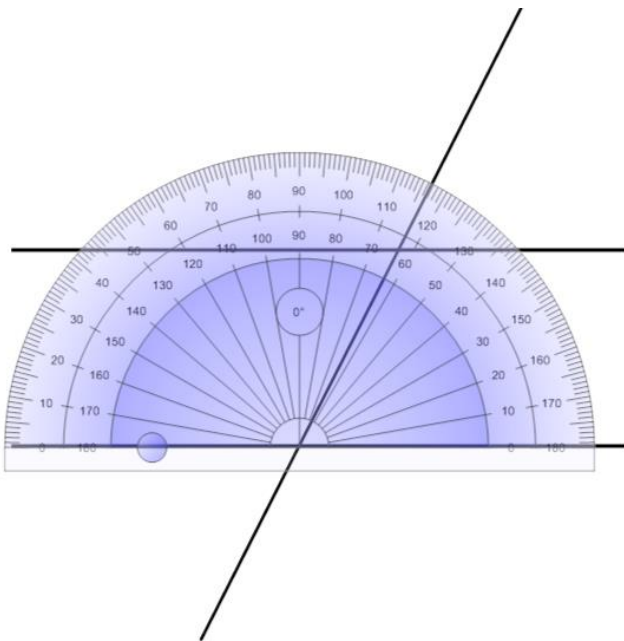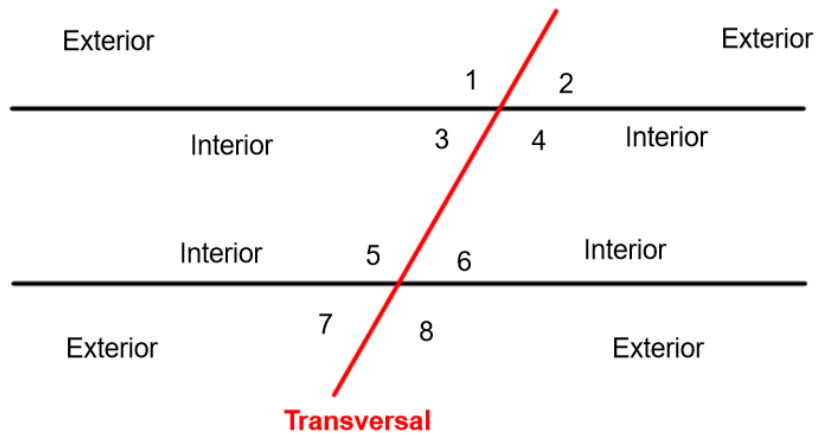
Opposite Angle Pairs: Straight Angle Pairs:

A.   The following diagrams are two parallel lines with a transversal duplicated. Use the protractor image to determine the angle measurements for the top four and bottom four angles.

Exterior | Exterior

1 | 2

3 | 4 Interior

Interior

5 | 6

7 | 8

Transversal

Angles Properties:

Corresponding Angles:

Alternate Interior Angles:

Alternate Exterior Angles:

Same Side Interior Angles:

Opposite Angles:

Straight Angles: