**Harold’s Geometry**

**“Cheat Sheet”**

26 November 2017

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| **Parallel Lines with Traversals** | | |
| http://library.thinkquest.org/20991/media/geo_tran.gif http://ancastermath.wikispaces.com/file/view/parallel_lines_complementary.jpg/51532801/parallel_lines_complementary.jpg | | |
| **Givens:**   * Line **r** is parallel to line **s**. * Line **t** transverses lines **r** and **s**. | | |
| **Rule #** | **Rule** | **Angles** |
| 1 | Corresponding angles are congruent (= alt. int. + vert.) | 1&5, 2&6, 4&8, 3&7 |
| 2 | Vertical angles are congruent | 1&3, 2&4, 5&7, 6&8 |
| 3 | Alternate interior angles are congruent | 3&5, 4&6 |
| 4 | Alternate exterior angles are congruent | 1&7, 2&8 |
| 5 | Supplementary angles add to 180° | 1&2, 2&3, 3&4, 4&1, 5&6, 6&7, 7&8, 8&5 |
| 6 | Complimentary angles add to 90° | a&j (blue), i&f (red) |