**Trigonometry Review**

Radians:

|  |
| --- |
| *How many radians go all the way around the unit circle?* |
| Radians= arc length/radius  Radians = circumference (2∏r)/r  Therefore:  360·= 2∏  180·=∏ |

|  |  |
| --- | --- |
| **Special Triangles:**  Remember, we use these to help determine values in our questions. They’re used when simplifying/proving trig identities, when solving for equations etc. So keep these in mind because they often provide the “multiple answers” we’re looking for. | |
| http://www.nipissingu.ca/calculus/tutorials/trigonometrygifs/sp_triangle_01.gif | http://www.biology.arizona.edu/biomath/tutorials/Trigonometric/graphics/trig_30_60_90.gif |

|  |  |  |
| --- | --- | --- |
| **Trigonometric Graphs**  Remember, we use *also* use *these* to help determine values in our questions. They’re used when simplifying/proving trig identities, when solving for equations etc. So keep these in mind because they often provide the “multiple answers” we’re looking for. | | |
| **Trigonometric Graph** | **Recipricol Graph** | |
| Graphing *cos*  http://www.bbc.co.uk/scotland/learning/bitesize/higher/maths/images/radians2_graphs02.gif | | Graphing sec  http://www.intmath.com/Trigonometric-graphs/sec.gif |
| Graphing *sin*  http://home.windstream.net/okrebs/C3-7.gif | | Graphing *csc*  http://www.calculatorsoup.com/images/trig_plots/graph_csc_pi.gif |
| Graphing *tan*  http://www.intmath.com/Trigonometric-graphs/tanx.gif | | Graphing *cot*  http://www.calculatorsoup.com/images/trig_plots/graph_cot_pi.gif |

**Transforming Trigonometric Functions**

F(x) =a *sin* (k(x-d)) +c

1. Amplitude

Vertical stretch/compression

Reflection

**k-** period of function (2∏/k for sin/cos) ( **/k**)

**d-** phase shift (horizontal) by radians right

1. Axis (vertical translation)

**Translating *sinx(x)* to *cos(x)***

*Sin O= cos(x-* )

Cos *O= sin (x+* )

**Practice:**

* Converting from degrees to radians
* Translating Trigonometric Graphs
* Re-try Trig Functions Quiz
* Determining Equations from Trig Translations
* Practice proving trig identities that involve using various trig proofs
* Determining Equilvalent trig Functions
* Addition and Subtraction Identities

**Notes/Advice**

* Gillian will be providing all trig Identities
* I recommend redoing practice tests and quizzes *after studying* as a “test run”
* Redo assignment questions that you found tricky
* Remember good studying techniques that we learned from our classmates
* Get a Good Nights Sleep

*Good Luck! ☺*