Topics Covered on Final Exam, Math 1523, Spring 2014

1) Arithmetic sequences/series [find general term, find a specific term, find number of terms,

   finding sum of terms]

2) Geometric sequence/series [find general term, find a specific term, finding sum of finite
   geometric series, finding sum of infinite geometric series]

3) Angles [find reference angle, convert radian to degree and vice versa]

4) Graphs [amplitude, period]

5) Inverse Trig. Function [find angle of right triangle, solve of type $\text{trig}(\text{trig}^{-1} (\#))$]

6) Find side or angle of a given right triangle

7) Know basic identities

8) Know $\sin 2x$ and $\cos 2x$

9) Solve trigonometric equation

10) Use law of sines and law of cosines to find side or angle of given triangle

11) Find area of triangle using special formulae

12) Vectors [norm, direction angle, dot product, orthogonal, angle between two vectors]

13) Trig. form to complex and complex form to trig. form

14) Parabola [vertex, focus, directrix, find equation given information]

15) Ellipse [center, vertices, foci, find equation given information]

16) Hyperbola [center, vertices, foci, asymptotes, find equation given information]