## Math 206-01

## Final Exam Information

The 1st final exam is Wednesday, December 1, during class. The 2nd final exam is Monday, December 13, 5pm-6:50pm, in Room 2625. Special office hours during finals week:

- Monday, December 13: 2:00pm 5:00pm
- Tuesday, December 14: 12:00pm 2:00pm
- Wednesday, December 15: 12:00pm 1:00pm

## Skills Checklist

- 1. List the sample space for an experiment and identify events.
- 2. Know the difference between theoretical and experimental probabilities.
- 3. Determine the theoretical probability of an event.
- 4. Understand and use the properties of probability.
- 5. Determine probabilities geometrically.
- 6. Draw tree diagrams and determine probabilities in multistage experiments.
- 7. Determine odds and expected values.
- 8. Draw and/or interpret statistical graphs.
- 9. Compute and interpret the mean, median, and mode of a data set.
- 10. Solve problems involving means and sums of data values.
- 11. Compute and interpret the range and standard deviation of a data set.
- 12. Draw and interpret a box plot.
- 13. Solve application problems involving the normal distribution.
- 14. Understand the terms and notions of elementary geometry (i.e. Sections 11.1 & 11.2).
- 15. Measure angles and convert from degrees/minutes/seconds to degrees.
- 16. Know the definitions of special common polygons.
- 17. Determine the sum of the measures of the interior and exterior angles of polygons.
- 18. Understand the consequences of parallel lines being cut by transversals. Know the names of the angles formed.
- 19. Know and be able to work with the congruence properties SSS, ASA, SAS, and AAS.
- 20. Know and be able to work with the similarity property AAA. Solve application problems involving similar triangles.

- 21. Be able to carry out basic constructions:
  - (a) Construct circles of given radius
  - (b) Copy angles
  - (c) Construct triangles given three sides
  - (d) Construct triangles given two sides and an included angle
  - (e) Construct a line parallel to a given line
  - (f) Bisect an angle
  - (g) Bisect a line segment
  - (h) Construct a perpendicular bisector
  - (i) Construct a line perpendicular to a given line
- 22. Understand units of linear measure, convert between different units, and find the perimeter or circumference of a figure.

In addition to everything listed above, the second final exam will also cover the following skills.

- 1. Understand units of area measure and convert between different units.
- 2. Compute areas of polygons and circles.
- 3. Understand and use the Pythagorean Theorem. Use the Pythagorean Theorem in applications and in constructions.
- 4. Compute the surface area and volume of a space figure.