

## Math 20-2 Final Exam Study Sheet

You will be given the following on a formula sheet:

- quadratic formula
- z-score and standard deviation
- sine & cosine law for sides and angles
- sum of interior angles of a polygon
- measure of each interior angle in a polygon
- circumference and area of a circle
- area of a triangle, rectangle, parallelogram, trapezoid
- surface area and volume of a rectangular prism, general prism, right cylinder, right pyramid, right cone and sphere
- z-score table

### Part A – Multiple Choice & Numeric Response (30 marks)

#### Radicals

- MC 1. changing radicals (mixed to entire or entire to mixed – square and cube roots)  
MC 2. solving a radical equation

#### Quadratic Functions

- NR 1.** solve by factoring  
MC 3. given x-intercepts write a quadratic equations  
MC 4. interpreting a graph using a graphing calculator

#### Logic and Reasoning

- MC 5. logical reasoning  
MC 6. continue a pattern

#### Geometry

- NR2.** find the interior angles of a polygon  
MC 7. angles formed by transversals  
MC 8. angles formed by transversals  
MC 9. angles formed by transversals  
MC 10. find the interior angles of a polygon and angle properties  
MC 11. congruency properties  
MC 12. sine/cosine law  
MC 13. sine/cosine law

## **Proportional Reasoning**

- MC 14. unit rates
- MC 15. interpret rates on graphs
- NR3.** find the rate of change on a graph
- MC 16. interpreting a graph and the rate of change
- MC 17. scale factor

## **Statistics**

- MC 18. statistical definitions
- NR4.** standard deviation
- MC 19. normal distribution characteristics
- MC 20. interpreting graphs of normal distribution
- MC 21. calculating mean and standard deviation
- MC 22. comparing z-scores
- NR5.** normal distribution word problem
- MC 23. confidence intervals
- MC 24. margin of error and confidence intervals
- NR6.** margin of error, confidence interval, sample size and confidence level

## **Part B – Alternate Response (6 marks)**

- 1. 2 marks
  - complete a geometrical proof by filling in the blanks
- 2. 2 marks
  - match triangles to the method of solving the triangle
- 3. 2 marks
  - working with scale factor

## **Part C – Written Response (14 marks)**

- 1. 3 marks
  - find the unknown angle measures in a diagram
- 2. 3 marks
  - solve a trig word problem
- 3. 6 marks
  - determine scale factor for linear measurement, area and volume
- 4. 2 marks
  - normal distribution word problem

**Total marks on exam: 50**

**Time: 3 hours**