

# EXAM REVIEW

## What do you need to know about **LINEAR SYSTEMS**?

Solve by graphing  
Solve by substitution  
Solve by elimination

## Types of word problems

Speed / Distance / Time  
Chemical solutions  
Different options (phone plan)

## What do you need to know about **ANALYTIC GEOMETRY?**

Distance on a plane  
 Distance from a point to a straight line  
 Equation of a circle  
 Midpoint of a line segment  
 Median  
 Altitude of a triangle  
 Perpendicular Bisector  
 Properties of geometric figures  
 Centroid  
 Orthocentre  
 Circumcentre

### Types of word problems

Pebble in a pond  
 Road to campsite  
 Find headquarters for businesses

## What do you need to know about **QUADRATICS?**

Finding zeros, vertex, y-int, axis of symmetry  
 Transformations  
 Graphing using an equation  
 Change between the 3 forms of equations  
 Finding an equation using a graph  
 Expanding product of binomials  
 Factoring  
 Quadratic Formula  
 Complete the Square  
 Discriminant

### Types of word problems

Break even  
 Max Profit  
 Revenue - changing in ticket price vs. attendance  
 Area  
 Bridge  
 Pool with uniform width deck

**What do you need to know about TRIGONOMETRY?**

Similar triangles  
Pythagorean Theorem  
Primary Trigonometric Ratios  
Sine Law  
Cosine Law  
Angle of elevation/depression

**Types of word problems**

Height of tree/building  
Helicopter finding hikers  
Boats/planes traveling using directions  
Area/perimeter of triangles