

# Math 9A - Review for January Exam

## Unit 3 - Rational Numbers

Page 143 *Study Guide*  
Page 121 # 2, 3, 6, 8, 9  
Page 144 #5, 6, 7, 8, 10, 12  
Page 145 # 14, 19, 23

### Layout of Exam

Multiple Choice	25 points
Short answer	44 points
Word Problems	18 points

## Unit 1 - Square Roots / Pythagoras Theorem

Page 44 *Study Guide*  
Page 21 # 2, 3, 5, 7, 8, 9  
Page 48 # 1, 2, 4

## Unit 1 - Surface Area

Page 44 *Study Guide*  
Page 46 #15, 16  
Page 47 #19  
Page 48 #5, 6

## Unit 7 - Similarity

Page 376 *Study Guide*  
Page 352 # All  
Page 377 #1- 6  
Page 378 #7 - 11  
Page 380 #1,2

## Unit 8 - Circle Geometry

Page 417 *Study Guide*  
Page 403 ALL  
Page 418 #1, 2, 5, 7, 8, 9, 10  
Page 420 #1, 2, 3, 6

## Other Review Material

- Tests & quizzes
- Worksheets
- assignments

**Student Checklist for January Exam** – You know you are ready for the Exam when you can check that you are confident with each learning target below.

**I can.....**

	Add & subtract rational numbers (negative/positive/decimal.....)
	Multiply & divide rational numbers (negative/positive/decimal.....)
	Add & subtract fractions
	Multiply & divide fractions
	Change mixed fractions to improper and improper to mixed
	Put rational numbers (integers, fractions, decimals) in order
	Apply order of operations (BEDMAS) to correctly solve a math question
	Estimate the square root of a number
	Calculate the square root of a number
	Decide when a fraction is a perfect square
	Find unknown side of a right triangle using Pythagoras ( $c^2=a^2+b^2$ )
	Calculate the area of a rectangle, triangle and circle
	Calculate the surface area of a rectangular prism
	Calculate the surface area of a triangular prism
	Calculate the surface area of a cylinder
	Calculate the surface area of a combination of rectangular prisms, triangular prisms and cylinders
	Calculate a scale factor given two lengths
	Determine the length on a scale diagram given the scale factor and the original measurement
	Draw a scale diagram given the original and scale factor
	Identify when polygons are similar
	Find missing measurements on similar polygons
	Identify when triangles are similar
	Find missing measurements on similar triangles
	Recognize tangents, radii, chords, diameters, perpendicular bisectors, central angles, inscribed angles, major and minor arcs, and isosceles and right angle triangles
	Know the tangent, chord and angle properties associated with circles
	Use the tangent, chord and angle properties of circles to find unknown lengths and angles
	Solve problems using the tangent, chord and angle properties