

PRE-ALGEBRA
SEMESTER 2 EXAM ITEM SPECIFICATION SHEET & KEY



Free Response						
#	Objective	Syllabus Objective		NV State Standard		
1	Make and interpret box-and-whisker plots. Apply appropriate measures of data distribution, using interquartile range and central tendency.	6.1 6.2			5.8.1 5.8.2	
2	Represent relations and functions using graphs and find solutions of linear equations in two variables.	4.3 4.4			2.8.2	
3	Use Pythagorean's Theorem to find missing measures and find unknown side lengths of similar figures.	5.5 5.6			4.8.2 4.8.7	
Multiple Choice						
#	Objective	Syllabus Objective	NV State Standard	08/09 Practice Key A	08/09 Practice Key B	09/10 Final Key
1	Find probabilities and odds.	6.7 6.8 6.9	5.8.5	B	C	
2	Use the counting principle to find probabilities.	6.11	5.8.4	A	C	
3	Make and interpret stem-and-leaf plots.	6.1	5.8.1	A	A	
4	Apply appropriate measure of data distribution, using interquartile range.	6.1 6.2	5.8.1 5.8.2	C	C	
5	Make and interpret box-and-whisker plots.	6.1	5.8.1	D	D	
6	Formulate inferences and predictions through interpolation and extrapolation of data to solve practical problems.	6.4	5.8.6	C	D	
7	Describe measures of central tendency.	6.2	5.8.2	B	B	
8	Use permutations or combinations to count possibilities.	6.10 6.11	5.8.4	C	C	
9	Use permutations or combinations to count possibilities.	6.10 6.11	5.8.4	B	B	
10	Determine the number of outcomes using Venn diagrams.	6.12	5.6.4	C	C	
11	Find compound probability.	6.7	5.8.5	B	D	
12	Find the percent of a number.	3.13	1.8.7	C	A	
13	Estimate with percents.	3.18	1.8.6	B	C	
14	Solve percent problems using proportions and equations.	3.14	1.8.7	C	B	
15	Find the percent of change.	3.15	3.8.5	B	B	
16	Solve percent problems involving markups, discounts, sales tax, and tips.	3.16	3.8.4	C	C	
17	Calculate simple interest earned and account balances.	3.17	3.7.4	A	D	
18	Identify functions using graphs, mapping diagrams, tables, ordered pairs.	4.3	2.8.2 2.8.4	D	C	
19	Identify the domain and range of a relation.	4.3	2.8.2	A	A	
20	Find solutions of linear equations in two variables.	4.4	2.8.2	D	C	
21	Determine the x- and y- intercepts of a linear equation.	4.6	4.8.5	D	B	
22	Find the slope of a line.	4.5	4.8.5	A	A	
23	Find and interpret slopes.	4.5	4.8.5	A	D	
24	Translate between a verbal description and graphic representation of a function.	4.3	2.8.4	D	B	
25	Graph linear equations in slope-intercept form.	4.7	4.8.5	D	C	
26	Find the slope and y-intercept of an equation.	4.7	4.8.5	A	B	
27	Find and approximate square roots.	5.4	1.8.5	C	A	

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Multiple Choice						
#	Objective	Syllabus Objective	NV State Standard	08/09 Practice Key	08/09 Final Key*	09/10 Final Key
28	Use the Pythagorean Theorem to determine the measure of a missing side.	5.5	4.8.7	B	A	
29	Use the Pythagorean Theorem to solve problems.	5.5	4.8.7	C	B	
30	Compare and order real numbers.	5.7	1.8.3	D	D	
31	Use the midpoint or distance formula.	5.8	4.8.5	B	B	
32	Use the midpoint or distance formula.	5.8	4.8.5	D	D	
33	Solve for angles and lengths of sides in triangles.	5.2 5.17	3.6.3	D	A	
34	Solve for angles and lengths of sides in triangles; classify.	5.16 5.25	4.8.1 4.7.1	C	D	
35	Classify polygons.	5.16	4.7.1	B	A	
36	Find unknown angle measures using the sum of the interior angles of a polygon.	5.25	4.8.1	C	B	
37	Find the perimeter or area of parallelograms or trapezoids.	5.17	3.6.3	A	C	
38	Find the circumference or area of a circle.	5.18	3.6.3	C	D	
39	Find the surface area of a prism or cylinder.	5.19	3.7.3	C	A	
40	Find the volume of a prism or cylinder.	5.19	3.7.3	B	C	
41	Describe how changes in the value of one variable affect the values of the remaining variables in a relationship.	5.14	3.8.3	A	B	
42	Identify and write polynomials.	7.1	2.6.3	D	D	
43	Add and subtract polynomials.	7.2	2.8.3	B	B	
44	Multiply a monomial and a polynomial.	7.3	2.12.3	A	D	
45	Extend arithmetic and geometric sequences.	7.4	2.8.1	B	C	
46	Extend arithmetic and geometric sequences.	7.4	2.8.1	C	D	
47	Identify and find measures of complementary and supplementary angles.	5.21 5.22	4.6.6	A	B	
48	Identify and find measures of angles when a transversal intersects parallel lines.	5.22 5.23	4.6.6 4.7.6	A	A	
49	Identify and find measures of angles when a transversal intersects parallel lines.	5.22 5.23	4.6.6 4.7.6	B	C	
50	Translate, rotate, reflect or dilate figures in a coordinate plane.	5.26	4.8.3	D	B	