

**Item Analysis of Mat-010 Final Exam spring, 2009 based on final exams of 292 Mat-010 and Mat-010B (day, evening and off-campus) students**

**Submitted by Susan Shulman**

<b># of wrong responses (out of 267)</b>	<b>% of students getting a wrong response</b>	<b>Question #</b>	<b>Skill</b>
191	65%	50	Dividing integers
184	63%	9	Multi-step word problem involving the cost of fencing materials
152	52%	34	Percent increase word problem
152	52%	37	Converting km to m
142	48%	38	Converting g to kg
137	47%	42	Finding the area of a circle
132	45%	33	Solving a percent equation
128	44%	41	Find the circumference of a circle
125	43%	21	Fractional word problem
124	42%	36	Converting ounces to cups
119	41%	20	Fractional word problem w/addition
119	41%	31	Converting fractions to percent
117	40%	19	Adding mixed numbers
114	39%	22	Writing a word name for a decimal
113	39%	26	Changing a fraction to a repeating decimal
113	39%	28	Solving a proportion with similar rect.
112	38%	12	Finding a fraction of a fraction
110	38%	7	Whole number order of operations
109	37%	48	Subtracting integers
106	36%	16	Dividing mixed numbers
102	35%	39	Pythagorean Theorem
100	34%	45	Finding the median of a set of numbers
97	33%	23	Rounding decimals
95	33%	32	Solving a percent word problem
92	32%	5	Simplifying 0 divided by a number
92	32%	18	Order of operations with fractions
88	30%	44	Finding the mean of a set of numbers
87	30%	15	Multiplying mixed numbers
86	29%	40	Finding the area of a rectangle
82	28%	27	Solving a proportion
75	26%	25	Converting a fraction to a decimal
70	24%	13	Multiplying fractions
69	24%	14	Dividing fractions

<b># of wrong responses (out of 267)</b>	<b>% of students getting a wrong response</b>	<b>Question #</b>	<b>Skill</b>
68	23%	17	<b>Adding fractions with different denominators</b>
66	23%	49	<b>Multiplying integers</b>
64	22%	4	<b>Solving a whole number word problem</b>
60	21%	29	<b>Converting a percent to a decimal</b>
59	21%	11	<b>Simplifying a fraction</b>
55	19%	43	<b>Finding the volume of a rectangular solid</b>
53	18%	46	<b>Finding the mode of a set of numbers</b>
51	17%	35	<b>Converting feet to inches</b>
44	15%	47	<b>Adding integers</b>
39	13%	1	<b>Subtracting whole numbers</b>
35	12%	6	<b>Solving a whole number word problem</b>
27	9%	30	<b>Converting a decimal to a percent</b>
25	9%	3	<b>Multiplying whole numbers</b>
25	9%	2	<b>Place value</b>
24	8%	8	<b>Solving a whole number word problem</b>
20	7%	10	<b>Changing a mixed number to an improper fract.</b>
12	4%	24	<b>Subtracting decimals</b>