

ITEM ANALYSIS OF MAT-010 FINAL EXAM Fall/2008 based on final exams of 383 Basic Mathematics students (including Mat-010, Mat010B, day and evening students)

Submitted by Susan Shulman

# of wrong responses (out of 383)	% of students getting a wrong response	Question #	Description
267	70%	50	Division of integers
235	61%	9	Multi-step word problem with perimeter (fencing)
209	55%	42	Find the area of a circle, given the diameter
206	54%	20	Subtraction with mixed numbers (word problem)
200	52%	31	Convert a fraction to a percent
187	49%	22	Writing a word name for decimals
186	49%	21	Word problem with fractions (division)
168	44%	41	Find the circumference of a circle, given the radius
164	43%	33	Percent problem (25 = ____ % of 150)
158	41%	36	Convert ounces to cups
157	41%	38	Convert g to kg
156	41%	7	Order of operations with whole numbers
154	40%	26	Write a fraction as a repeating decimal
151	39%	45	Finding a median
151	39%	48	Subtracting integers
148	39%	19	Adding mixed numbers
146	38%	28	Proportions with similar polygons
143	37%	15	Multiplying mixed numbers
143	37%	16	Dividing mixed numbers
139	36%	5	Division by zero
139	36%	37	Convert km to m
136	36%	34	Percent increase or decrease
135	35%	23	Rounding decimals

# of wrong responses out of 383	% of students getting a wrong response	Question #	Description
134	35%	39	Pythagorean theorem
117	31%	17	Adding fractions with unlike denominators
111	29%	12	Finding a fraction of a fraction
109	28%	32	Percent word problem
102	27%	44	Finding the mean of a set of numbers
101	26%	18	Order of operations with fractions
100	26%	13	Multiplying fractions
98	26%	40	Find the area of a square
97	25%	11	Simplifying a fraction
97	25%	25	Converting fractions to decimals
97	25%	49	Multiplying integers
81	21%	4	Whole number word problem
81	21%	29	Converting percents to decimals
78	20%	27	Solving a proportion
70	18%	8	Whole number word problem
70	18%	47	Adding integers
69	18%	46	Finding a mode
59	15%	35	Converting feet to inches
58	15%	6	Whole number word problem
57	15%	30	Converting decimals to percents
56	15%	43	Finding the volume of a rectangular solid
53	14%	2	Subtracting whole numbers
52	14%	14	Dividing fractions
40	10%	1	Identifying place value
29	8%	24	Subtracting decimals
28	7%	3	Multiplying whole numbers
24	6%	10	Changing a mixed number to an improper fraction