

ITEM ANALYSIS OF MAT-010 FINAL EXAM Sp/2008 based on final exams of 180 Basic Mathematics students (including Mat-010, Mat010B, day and evening students)

Submitted by Susan Shulman

# of wrong responses (out of 180)	% of students getting a wrong response	Question #	Description
111	62%	42	Find the area of a circle, given the diameter
110	61%	45	Division of integers
97	54%	20	Word problem with fractions (subtraction)
96	53%	9	Multi-step word problem with perimeter (fencing)
94	52%	41	Find the circumference, given the radius
93	52%	15	Multiplication of mixed numbers
92	51%	22	Writing a word name for decimals
88	49%	21	Word problem with fractions (division)
87	48%	48	Subtraction of integers (-3-10)
82	46%	38	Converting grams to kilograms
81	45%	7	Order of operations with whole numbers
80	44%	28	Proportion with similar triangles
79	44%	33	Percent problem ($25 = \quad \% \text{ of } 150$)
78	43%	36	Convert ounces to cups
75	42%	39	Pythagorean Theorem
73	41%	31	Converting a fraction to a decimal
73	41%	32	Percent word problem
72	40%	23	Round decimals
71	39%	37	Converting km to m
70	39%	18	Order of operations with fractions
69	38%	5	Division by zero
68	38%	19	Adding mixed numbers
62	34%	16	Dividing mixed numbers

# of wrong responses out of 180	% of students getting a wrong response	Question #	Description
61	34%	34	Percent decrease word problem
59	33%	12	Multiplication of a fraction
57	32%	40	Finding the area of a square
57	32%	45	Finding a median
53	29%	26	Converting fractions to decimals (repeating result)
52	29%	17	Adding proper fractions
51	28%	44	Find a mean
51	28%	49	Multiplication of integers (-10)(-5)(-6)
48	27%	13	Multiplication of fractions
48	27%	25	Converting fractions to decimals
46	26%	11	Simplification of fractions
39	22%	35	Converting feet to inches
38	21%	29	Converting percents to decimals
38	21%	47	Adding integers (-6 +(-12))
34	19%	8	Whole number word problem
29	16%	4	Whole number word problem
27	15%	14	Dividing fractions (proper by whole number)
26	14%	30	Converting decimals to percents
20	11%	43	Finding the volume of a rectangular solid
18	10%	27	Solving a proportion
16	9%	1	Place value
16	9%	46	Finding a mode
14	8%	24	Subtraction of decimals
11	6%	6	Whole number word problem involving division
10	6%	2	Adding integers
6	3%	10	Changing a mixed number to an improper fraction
5	3%	3	Multiplication of whole numbers