

**MTH/SLS 217 Syllabus**  
**Mathematics for Elementary Teachers (with Activities)**  
**Beckmann, 2nd Ed, 2008, Pearson**

CSI, Dept of Math  
 Fall 2007  
 (Syllabus subject to change.)

Day	Topics	Reading (Text)	Practice Probs (page) prob #s	Problems (page) prob #s	Challenge Problems	Activities (Activity Book)
1a	Intro to class. Writing explanations. Overview of real number system.	1.1, 1.2 2.1	9) 1 21) 1-4	10) 1, 6, 10		
1b	Decimals: review. Decimals: representation.	2.2 2.3	29) 2, 3a-f, 4, 5 40) 2, 3, 9, 10	30) 2bc, 3, 4cd 46) 3, 11, 16		2C(1-3) 2D(4)
2a	Decimals: comparing and ordering. Decimals: rounding.	2.4 2.5	54) 2-7 61) 1, 2, 3	57) 2, 4, 7, 10 62) 1, 2, 3	62) 4	2K 2M
2b	Fractions: meaning and problem solving.	3.1	70) 2-7	74) 6, 7, 9, 13, 14, 17	76) 18	3B
3a	Fractions on a number line. Fraction equivalence.	3.2 3.3	80) 2-6 88) 1-4, 7, 9, 10	82) 2, 4, 5 93) 3, 5, 8, 13, 18, 19	95) 21	3E, F 3G(2-4), K
3b	Fraction comparison. Percentages and problem solving.	3.4 3.5	103) 2-5 115) 1, 2, 5, 9	106) 1-4, 6, 7, 8, 17 120) 3, 4, 6	107) 18 122) 25	3P 3R, S
4a	<b>Review</b>	See note [3]				2G; 3H,Q
4b	<b>Test 1</b>					
5a	Addition & subtraction: meanings	4.1	135) 1-5	137) 1, 4, 8, 9, 13		4A, D
5b	Decimal addition and subtraction.	4.2	146) 2-6	148) 2-6, 11, 12	149) 14	4E, F, G
6a	Fraction addition and subtraction	4.3	156) 1-9	160) 1-4, 6, 11, 14-16		4L(3,4),N,O,P
6b	Using equations to justify calculations; associativity/commutativity of addition.	4.6	187) 1-7	189) 4, 5, 6, 9, 10	190) 13	4Z, AA
7a	Multiplication: definition and meaning. Area and commutative property. Volume and associative property.	5.1(195-6) 5.3 5.4	212) 1, 2, 3 221) 1, 3, 4	203) 2 213) 1, 4, 6 222) 7, 11	215) 12 225) 14	5A(1) 5E, F
7b	Distributive property; operation order. Multiplication by 10.	5.5 5.2	232) 2-4, 6-8 207) 1	235) 4, 6, 8, 14, 16 207) 1, 2, 3	237) 23	5P 5B
8a	<b>Review</b>	See note [3]				4H,Y; 5K,O,T,V,X
8b	<b>Test 2</b>					
9a	Multiplication by fractions: meanings.	6.1	268) 1, 4	269) 3, 4, 5, 6, 8		6A, D(3)
9b	Multiplication by fractions: calculation. Multiplication by negative numbers.	6.1 6.3	268) 2, 3, 5 281) 1, 2, 3	270) 9, 11, 12 281) 1	272) 18	6C 6J
10a	Multiplying multidigit whole numbers. Multiplying decimals.	5.7 6.2	254) 2-5 275) 1, 2	257) 4, 6, 10 277) 1, 3, 4, 5	259) 12	5AA(7), BB 6H
10b	Division: meanings.	7.1	295) 1a-g, 2, 10	298) 1a-f, 2, 3, 4, 8		7A, C
11a	Division involving 0. Long division.	7.1 7.2	296) 3, 4, 6, 7 310) 1-4, 7	299) 7 312) 2, 4, 5, 7, 9		7B 7H
11b	Fraction representation of division. Division by fractions.	7.3 7.4	323) 1-5 335) 1, 2, 7	325) 1, 2, 3, 7 339) 1, 2, 3, 6	325) 14	7N 7Q, R
12a	Division by fractions (continued).	7.4	335) 4a-d, 8	339) 4, 10, 12, 13	341) 15	
12b	Division by decimals.	7.5	348) 2-7	350) 1c, 2, 4, 5, 7		7V, W
13a	<b>Review</b>	See note [3]				6E, K, M(1); 7D, K, M, U
13b	<b>Test 3</b>					
14a	<b>Review</b>					
14b	<b>Review</b>					
15	<b>Final Exam</b>					

Notes:

[1] For each problem set, the first page number only is given.

[2] All problems require explanation, as illustrated in Practice Problems.

[3] Read Chapter Summaries as part of Review.