Math Mammoth International Version (Canada) Grade 3
End-of-the-Year Test Answer Key

1.

×	0	1	2	3	4	5	6	7	8	9	10	11	12
0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	1	2	3	4	5	6	7	8	9	10	11	12
2	0	2	4	6	8	10	12	14	16	18	20	22	24
3	0	3	6	9	12	15	18	21	24	27	30	33	36
4	0	4	8	12	16	20	24	28	32	36	40	44	48
5	0	5	10	15	20	25	30	35	40	45	50	55	60
6	0	6	12	18	24	30	36	42	48	54	60	66	72
7	0	7	14	21	28	35	42	49	56	63	70	77	84
8	0	8	16	24	32	40	48	56	64	72	80	88	96
9	0	9	18	27	36	45	54	63	72	81	90	99	108
10	0	10	20	30	40	50	60	70	80	90	100	110	120
11	0	11	22	33	44	55	66	77	88	99	110	121	132
12	0	12	24	36	48	60	72	84	96	108	120	132	144

2. a. 14, 24, 25, 36 b. 28, 40, 27, 35 c. 9, 16, 49, 32 d. 56, 30, 48, 54

3. a. 7, 5, 8, 7 b. 8, 5, 11, 7 c. 9, 7, 4, 9 d. 10, 8, 3, 3

4. a. 310, 149 b. 620, 344 c. 148, 80

5. a. 33, 5 b. 643, 45 c. 15, 378

6. a. 579. To check, add 579 + 383 = 962 using the grid. b. 2 476. To check, add 2 476 + 4 526 = 7 002 using the grid.

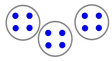
7. a. 7 153 b. 278. Note the order of operations; the latter subtraction is done first.

8. a. △ is 294. Solve by subtracting 708 − 414.
   b. △ is 824. Solve by adding 485 + 339.

9. His total was \$185 + \$32 = \$217. His change was \$300 − \$217 = \$83.

10. 160 kilometres. Note that the half-way point is at 150 kilometres.
    They stopped at 140 kilometres (10 kilometres before 150 kilometres).

11. a. They received 8 × 100 = 800 light bulbs
    b. There are 800 − 64 = 736 left.

12. 

13. 5 × 25 = 125. You can solve it by adding repeatedly: 25 + 25 + 25 + 25 + 25 = 125

14. a. 48 b. 20 c. 41

15. a. 7 × 4 = 28 legs
    b. 5 × 2 = 10 legs
    c. 8 × 4 + 6 × 2 = 44 legs

16. 8 tables, because 8 × 4 = 32, which is more than 31. Seven tables is not enough.

17. It would cost a total of 3 × \$8 + 3 ×\$6 = \$24 + \$18 = \$42.

18. She needs 7 bags. (Because 7 × 4 = 28.)

19.

	a. 10:51	b. 2:34	c. 3:57	d. 5:38
10 min. later	11:01	2:44	4:07	5:48

20. a. 35 minutes b. 5:30 AM c. 28 May

21. a. 28 hours b. 12 hours c. 9 hours more d. 48 hours

22. a. $25.54 b. $9.10 c. $12.70

23. a. $2.90 b. $0.55

24. $0.60. (You can add $2.35 + $2.35 + $2.35 + $2.35 = $9.40 to find the total cost.)

25. a. 700 b. 2 000

26. a. > b. < c. < d. > e. >

27. a. 5 700; 8 600
    b. 1 200; 7 800

28. a. 740 b. 990 c. 250 d. 670

29.

a. Round the numbers, then add: 3 7 8 2 + 2 2 5 5 ↓ ↓ 3 800 + 2 300 = 6 100	Calculate exactly: 1 1 3 7 8 2 + 2 2 5 5 6 0 3 7
b. Round the numbers, then subtract: 8 1 4 9 – 8 8 8 ↓ ↓ 8 100 – 900 = 7 200	Calculate exactly: 10 7 ~~0~~ 14 ~~8 1 4 9~~ – 8 8 8 7 2 6 1

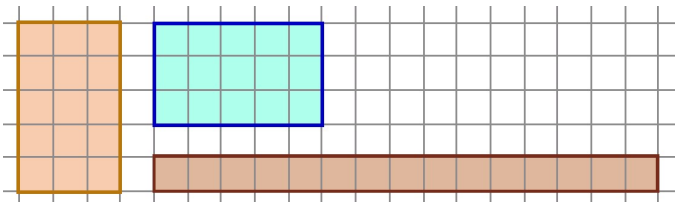
30. A - rectangle B - square C - rhombus D - rhombus G - rhombus
    Also, F is a parallelogram; however that is not studied in third grade.

31. Perimeter 22 units Area 24 square units or squares
    Note that the student should also give the "units" and "square units" or "squares", not just a plain number.

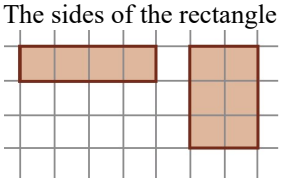
32. a. Part 1: 108 m^2 Part 2: 270 m^2 b. 96 m
    Note that the student should also give the units "m^2" and "m" in his/her answer, not just plain numbers.

33. It measures 23 cm.

34. a. The sides of the rectangle could be 5 and 3, or 15 and 1. Some examples below:



b. The sides of the rectangle could be 1 and 4, or 2 and 3.



35. $4 \times (2 + 5) = 4 \times 2 + 4 \times 5 = 28$ squares

36. Check the student's answers.

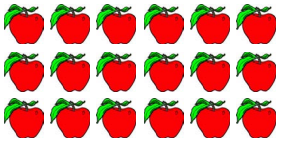
a.

b.

37. mm cm m km

38. millilitres (ml)

39. a. m b. cm c. kg d. ml e. kg f. m

40. 

$3 \times 6 = 18 \quad 18 \div 3 = 6$

$6 \times 3 = 18 \quad 18 \div 6 = 3$

41. a. 17, not possible b. 1, not possible c. 1, 0

42. a. 8 R1 b. 4 R4 c. 6 R5

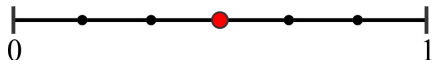
43. Can he divide the children equally into teams of 5? **No.**
Teams of 6? **Yes.**
Teams of 7? **No.**

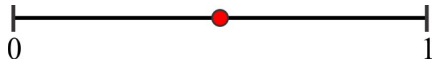
44. Each child paid $10.

45. a. $\frac{3}{8}$ b. $\frac{7}{9}$ c. $\frac{2}{4}$ d. $2\frac{2}{5}$ e. $\frac{2}{3}$ f. $\frac{9}{10}$

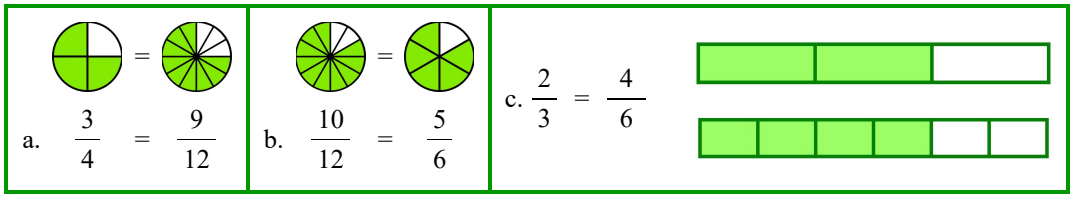
46. a. 1 = 10/10 b. 2 = 10/5 c. 4 = 24/6

47.





48.



49. a. < b. < c. < d. >

50. We cannot tell who ate more pie, because the two pies are of different sizes and it is not totally clear from the pictures which is more pie. And, even though the fraction 7/12 is more than 1/2, this thinking cannot be used here when each whole pie is a different size than the other one.