

End-of-the-Year Test Grade 3 Answer Key

Instructions to the teacher:

My suggestion for grading is below. The total is 207 points. A score of 166 points is 80%.

Grading on question 1 (the multiplication tables grid): There are 169 empty squares to fill in the table, and the completed table is worth 17 points. Count how many of the answers the student gets right, divide that by 10, and round to the nearest whole point. For example: a student gets 24 right. $24/10 = 2.4$, which rounded becomes 2 points. Or, a student gets 85 right. $85/10 = 8.5$, which rounds to 9 points.

Question	Max. points	Student score
Multiplication Tables and Basic Division Facts		
1	17 points	
2	16 points	
3	16 points	
<i>subtotal</i>		/ 49
Addition and Subtraction, Including Word Problems		
4	6 points	
5	6 points	
6	4 points	
7	4 points	
8	4 points	
9	3 points	
10	3 points	
11	4 points	
<i>subtotal</i>		/ 34
Multiplication and Related Concepts		
12	1 point	
13	1 point	
14	3 points	
15	3 points	
16	1 point	
17	2 points	
18	1 point	
<i>subtotal</i>		/ 12
Time		
19	8 points	
20	3 points	
<i>subtotal</i>		/ 11

Question	Max. points	Student score
Graphs		
21a	1 point	
21b	1 point	
21c	1 point	
21d	2 points	
<i>subtotal</i>		/ 5
Money		
22a	1 point	
22b	2 points	
22c	2 points	
23	2 points	
24	3 points	
<i>subtotal</i>		/ 10
Place Value and Rounding		
25	2 points	
26	5 points	
27	4 points	
28	2 points	
29	8 points	
<i>subtotal</i>		/ 21
Geometry		
30	5 points	
31	2 points	
32	4 points	
33	2 points	
34	2 points	
35	3 points	
<i>subtotal</i>		/ 18

Question	Max. points	Student score
Measuring		
36	2 points	
37	2 points	
38	2 points	
39	6 points	
<i>subtotal</i>		/ 12
Division and Related Concepts		
40	2 points	
41	6 points	
42	3 points	
43	2 points	
44	2 points	
<i>subtotal</i>		/ 15
Fractions		
45	6 points	
46	3 points	
47	2 points	
48	3 points	
49	4 points	
50	2 points	
<i>subtotal</i>		/ 20
TOTAL		/ 207

End-of-the-Year Test Grade 3 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.

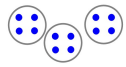
7. a. 7,153 b. **278**. Note the order of operations; the latter subtraction is done first.

8. a.  is **294**. Solve by subtracting $708 - 414$. b.  is **824**. Solve by adding $485 + 339$.

9. \$83

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

11. a. 800 light bulbs b. **736 are left**. Solve by subtracting $800 - 64$.

12. 

13. $5 \times 25 = 125$. You can solve it by adding repeatedly: $25 + 25 + 25 + 25 + 25 = 125$

14. a. 48 b. 20 c. 41

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

16. **8 tables**, because $8 \times 4 = 32$, which is more than 31. Seven tables is not enough.

17. $3 \times \$8 + 3 \times \$6 = \$42$

18. **She needs 7 bags**. (Because $7 \times 4 = 28$.)

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. 45 minutes b. 3:50 PM c. May 28th

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.

<p>a. Round the numbers, then add:</p> $\begin{array}{r} 3,782 \\ \downarrow \\ 3,800 \end{array} + \begin{array}{r} 2,255 \\ \downarrow \\ 2,300 \end{array} = 6,100$	<p>Calculate exactly:</p> $\begin{array}{r} 3782 \\ + 2255 \\ \hline 6037 \end{array}$
<p>b. Round the numbers, then subtract:</p> $\begin{array}{r} 8,149 \\ \downarrow \\ 8,100 \end{array} - \begin{array}{r} 888 \\ \downarrow \\ 900 \end{array} = 7,200$	<p>Calculate exactly:</p> $\begin{array}{r} 8149 \\ - 888 \\ \hline 7261 \end{array}$

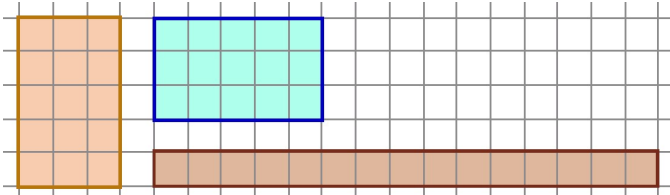
30. A - rectangle B - square C - rhombus D - rhombus G - rhombus
Also, F is a parallelogram; however that is not studied in third grade.

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.

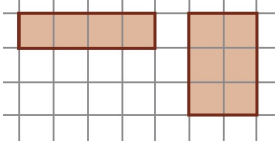
32. a. Part 1: 108 m^2 Part 2: 270 m^2 b. 96 m
Note that the student should also give the units “ m^2 ” and “m” in his or her answer, not just plain numbers.

33. 9 inches.

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 (or square units)

36. Check student's answers.

a. 

b. 

37. mm cm m km

38. ounces (oz) and milliliters (ml)

39. a. feet or ft b. cm c. kg/lb d. C (cups) e. kg f. feet or ft

40.  $3 \times 6 = 18$ $18 \div 3 = 6$
 $6 \times 3 = 18$ $18 \div 6 = 3$

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

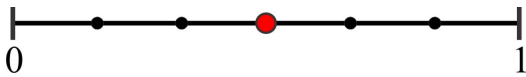
42. a. 8 R1 b. 4 R4 c. 6 R5

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

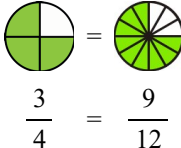
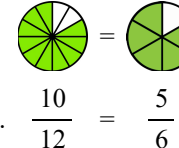

44. Each child paid \$10.00.

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

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



48.

 <p>a. $\frac{3}{4} = \frac{9}{12}$</p>	 <p>b. $\frac{10}{12} = \frac{5}{6}$</p>	<p>c. $\frac{2}{3} = \frac{4}{6}$</p>	
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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 the wholes are of different sizes.