

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

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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.

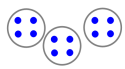
7. a. 7,153    b. **792**. Note the order of operations; the subtraction is done first.

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

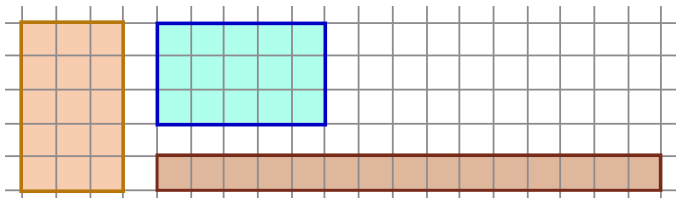
Note that the student should also give the “units” and “square units” or “squares”, not just a plain number.

32. a. Part 1:  $108 \text{ m}^2$     Part 2:  $270 \text{ m}^2$     b. 96 m

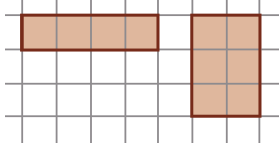
Note that the student should also give the units “ $\text{m}^2$ ” and “m” in his or her answer, not just plain numbers.

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

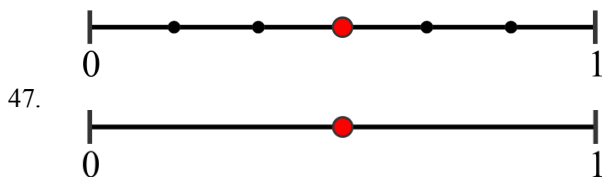
42. a. 8 R1 b. 4 R4 c. 6 R5

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

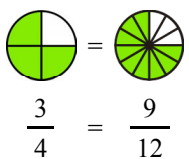
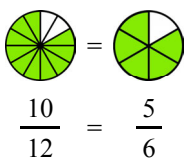
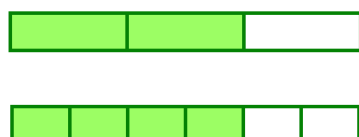
44. Each child paid \$10.00.

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

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



48.

 <p>a. <math>\frac{3}{4} = \frac{9}{12}</math></p>	 <p>b. <math>\frac{10}{12} = \frac{5}{6}</math></p>	<p>c. <math>\frac{2}{3} = \frac{4}{6}</math></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.