## End-of-the-Year Test Grade 4 Answer Key

**Instructions to the teacher:**

My suggestion for grading is below. The total is 192 points. A score of 154 points is 80%.

<table>
<thead>
<tr>
<th>Question</th>
<th>Max. points</th>
<th>Student score</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Addition, Subtraction, Patterns, and Graphs</strong></td>
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</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>/ 192</td>
<td></td>
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</table>
End-of-the-Year Test Grade 4 Answer Key

1. 1,980. Add to check: 1,980 + 543 + 2,677 equals 5,200.

2. a. \( \approx \$1 + \$9 + \$4 + \$9 = \$23 \)
b. Her bill is \( \$1.28 + \$8.92 + \$3.77 + \$9.34 = \$23.31 \). Her change is \( \$30 - \$23.31 = \$6.69 \).

3. Estimate: \( 5 \times \$0.90 + 2 \times \$1.20 = \$4.50 + \$2.40 = \$6.90 \)

4. a. 30; 84     b. 11; 14     c. 140; 19

5. a. \( \$35 + x = \$92 \); \( x = \$57 \)     b. \( x - 24 = 37 \); \( x = 61 \)

6. a. 2,000 1,750 1,500 1,250 1,000 750 500 250     b. 200, 500, 800, 1100, 1400, 1700

7. In the frequency table we list how many students got that score.

<table>
<thead>
<tr>
<th>Quiz score</th>
<th>Frequency</th>
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<tbody>
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<td>9</td>
<td>3</td>
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<tr>
<td>10</td>
<td>2</td>
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</table>

8. Rubber boots used to cost \( \$27.95 \) but now the price is \( \$21.45 \). How much is the discount?

\[
\$21.45 + x = \$27.95 \quad \text{OR} \quad x = \$27.95 - \$21.45
\]

\[x = \$6.50\]

9. a. 1,999     b. 4,980     c. 5,700

10. a. 800,050     b. 25,407

11. a. 30,000     b. 9,000     c. 600

12. a. <     b. >     c. >

13. 27,200 217,200 227,200 227,712

14. a. 440,000     b. 90,000     c. 27,500

15. a. 430,000     b. 500,000     c. 10,000

16. a. 501,663     b. 323,688

17. a. 210     b. 4,800     c. 3,200     d. 120     e. 80     f. 70

18. a. \$160     b. \$800     c. four days, since \( 4 \times \$160 = \$640 \)
19. a. estimate $5 \times 200 = 1,000$. Exact: 980  
b. estimate $40 \times 40 = 1,600$ or $30 \times 40 = 1,200$. Exact: 1,330  
c. estimate $7 \times 3,000 = 21,000$. Exact: 22,316  
d. estimate $90 \times 20 = 1,800$. Exact: 1,958  

20.  
\[
\text{Area} = 8 \times 127  
= 8 \times 100 + 8 \times 20 + 8 \times 7  
= 800 + 160 + 56 = 1,016
\]

21. a. Answers may vary. For example: $400 - 26 \times 14 = 400 - 364 = 36$. Or, $26 \times 14 = 364$ and $400 - 364 = 36$.  
b. $24 \times 60$ minutes = 1,440 minutes  
c. Answers may vary. For example: $4 \times 375$ cm = 1,500 cm. Or, $375$ cm + $375$ cm + $375$ cm + $375$ cm = 1,500 cm  
d. Answers may vary. For example: $(277 - 58) \times 8 = 1,752$. Or, $277 - 58 = 219$ and $8 \times 219 = 1,752$.  

22. Answers may vary if the test is printed with "shrink to fit" or "fit to printable area", or because of slight variability in rulers, or because of measuring inaccurately. Please check students' answers.  
a. 5 1/4 in. or 13 cm 3 mm. 13 cm 4 mm is also acceptable.  
b. 3 7/8 in. or 9 cm 8 mm. 9 cm 9 mm is also acceptable.  

23. 6 hours 12 minutes  

24. 1 h 45 min + 50 min + 1 h 15 min + 2 h 15 min + 55 min = 4 h 180 min, which is 7 hours.  

25. She worked 7 hours 30 minutes. From 7:00 am till 3:35 pm is 8 hours 35 minutes. Subtract from that 65 minutes, or 1 hour 5 minutes, to get 7 hours 30 minutes.  

26.  

<table>
<thead>
<tr>
<th>a.</th>
<th>b.</th>
<th>c.</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 lb = 96 oz</td>
<td>5 gal = 20 qt</td>
<td>4 ft 2 in. = 50 in.</td>
</tr>
<tr>
<td>2 lb 11 oz = 43 oz</td>
<td>2 qt = 8 cups</td>
<td>7 yd = 21 ft</td>
</tr>
</tbody>
</table>

27.  

<table>
<thead>
<tr>
<th>a.</th>
<th>b.</th>
<th>c.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 kg = 2,000 g</td>
<td>5 L 200 ml = 5,200 ml</td>
<td>8 cm 2 mm = 82 mm</td>
</tr>
<tr>
<td>11 kg 600 g = 11,600 g</td>
<td>3 m = 300 cm</td>
<td>10 km = 10,000 m</td>
</tr>
</tbody>
</table>

28. In four days, he jogs 15 km 200 m.  

29. 1 L 650 ml  

30. 17 ft 8 in  

31. a. 63. Check: $63 \times 9 = 567$  
b. 2,141. Check: $2141 \times 4 = 8,564$  

32. a. 9 R2  
b. 8 R1  
c. 6 R3  

33. a. Three photos on the last page; five pages were full.  
b. Your neighbor should be $36, because one foot of the fence costs $3.  

34. a. It cost $99. First find 1/8 of $264: $264 \div 8 = $33. Then to find 3/8 of it, multiply 3 \times $33 = $99.  
b. She needs 20 bags. $117 \div 6 = 19$ R3. Notice she needs a bag also for the three muffins that don't fill a bag.  

35.  

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36.

<table>
<thead>
<tr>
<th><strong>a. Is 5 a factor of 60?</strong></th>
<th><strong>b. Is 7 a divisor of 43?</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, because ( 5 \times 12 = 60 ).</td>
<td>No, because ( 43 \div 7 = 6 \text{ R1} ) (the division is not even).</td>
</tr>
</tbody>
</table>

c. Is 96 divisible by 4?  
Yes, because \( 96 \div 4 = 24 \)  
(the division is even).

d. Is 34 a multiple of 7?  
No, because 34 is not in the multiplication table of 7.  
OR: No, because \( 34 \div 7 = 4 \text{ R6} \); the division is not even.  
OR: No, because there is no whole number you can multiply by 7 to get 34.

37. Answers vary. For example: 2, 3, and 5. Here is a list of primes less than 100:  
2 3 5 7 11 13 17 19 23 29 31 37 41 43 47 53 59 61 67 71 73 79 83 89 97

38. a. 1, 2, 4, 7, 8, 14, 28, 56  
b. 1, 2, 3, 6, 13, 26, 39, 78

39. 155°

40. Check students' answers.

41. Answers vary. Check students' answers. The sum of the angle measures should be 180° or very close.  
42. \( 29° + x = 180°; \quad x = 151°. \)

43. Right angles.

44. Answers vary. Check students' answers. For example:

45.

46. Use subtraction. \( A = 28 \text{ ft} \times 12 \text{ ft} - 6 \text{ ft} \times 10 \text{ ft} = 336 \text{ ft}^2 - 60 \text{ ft}^2 = 276 \text{ ft}^2. \)

47. \( \frac{5}{8} + \frac{5}{8} = 1 \frac{2}{8} \)

48. There are still 2/4 or 1/2 of it left to do.
49. a. $1 \frac{2}{5}$  b. $\frac{5}{6}$  c. $6$

50. 

- **a. Each piece is split into 2 new ones.**
  
  $\frac{4}{5} = \frac{8}{10}$

- **b. Each piece is split into 3 new ones.**
  
  $\frac{2}{3} = \frac{6}{9}$

51. 

- **a.** $\frac{2}{3} = \frac{10}{15}$
- **b.** $\frac{3}{5} = \frac{9}{15}$
- **c.** $\frac{1}{6} = \frac{2}{12}$
- **d.** $\frac{1}{3} = \frac{3}{9}$

52. a. $>$  b. $>$  c. $<$  d. $<$

53. $\frac{65}{100} < \frac{7}{10} < \frac{5}{4}$

54. $2 \frac{1}{4}$ cups

55. a. $\frac{1}{8}$  b. $1 \frac{3}{5}$  c. $1 \frac{2}{12}$

56. 

- **0.08**
- **0.27**
- **0.55**
- **0.80**

57. a. $0.3$  b. $3.9$  c. $0.09$  d. $7.45$

58. a. $\frac{6}{10}$  b. $\frac{6}{7}/10$  c. $\frac{21}{100}$  d. $\frac{5}{5}/100$

59. a. $<$  b. $>$  c. $<$  d. $=$

60. a. $13.01$  b. $3.74$