## 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 $80 \%$.

| Question | Max. points | Student score |
| :---: | :---: | :---: |
| Addition, Subtraction, Patterns, and Graphs |  |  |
| 1 | 2 points |  |
| 2a | 1 point |  |
| 2b | 2 points |  |
| 3 | 2 points |  |
| 4 | 6 points |  |
| 5 | 4 points |  |
| 6 | 2 points |  |
| 7 | 4 points |  |
| 8 | 3 points |  |
|  | subtotal | 126 |
|  |  |  |
| Large Numbers and Place Value |  |  |
| 9 | 3 points |  |
| 10 | 2 points |  |
| 11 | 3 points |  |
| 12 | 3 points |  |
| 13 | 2 points |  |
| 14 | 3 points |  |
| 15 | 3 points |  |
| 16 | 4 points |  |
|  | subtotal | 123 |
| Multi-Digit Multiplication |  |  |
| 17 | 6 points |  |
| 18 | 3 points |  |
| 19 | 8 points |  |
| 20 | 3 points |  |
| 21a | 3 points |  |
| 21b | 2 points |  |
| 21c | 2 points |  |
| 21d | 3 points |  |
|  | subtotal | 130 |


| Question Max. points Student score |  |  |
| :---: | :---: | :---: |
| Time and Measuring |  |  |
| 22 | 2 points |  |
| 23 | 1 point |  |
| 24 | 3 points |  |
| 25 | 2 points |  |
| 26 | 6 points |  |
| 27 | 6 points |  |
| 28 | 2 points |  |
| 29 | 1 point |  |
| 30 | 2 points |  |
|  | subtotal | / 25 |
| Division and Factors |  |  |
| 31 | 4 points |  |
| 32 | 3 points |  |
| 33 | 4 points |  |
| 34a | 3 points |  |
| 34b | 2 points |  |
| 35 | 6 points |  |
| 36 | 4 points |  |
| 37 | 2 points |  |
| 38 | 4 points |  |
|  | subtotal | / 32 |
| Geometry |  |  |
| 39 | 2 points |  |
| 40 | 2 points |  |
| 41 | 3 points |  |
| 42 | 2 points |  |
| 43 | 2 points |  |
| 44 | 1 point |  |
| 45 | 2 points |  |
| 46 | 3 points |  |
|  | subtotal | / 17 |


| Question | Max. points | Student score |
| :---: | :---: | :---: |
| Fractions and Decimals |  |  |
| 47 | 1 point |  |
| 48 | 1 point |  |
| 49 | 3 points |  |
| 50 | 2 points |  |
| 51 | 4 points |  |
| 52 | 4 points |  |
| 53 | 2 points |  |
| 54 | 1 point |  |
| 55 | 3 points |  |
| 56 | 4 points |  |
| 57 | 4 points |  |
| 58 | 4 points |  |
| 59 | 4 points |  |
| 60 | 2 points |  |
| subtotal |  |  |

## 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. $\$ 35+x=\$ 92 ; x=\$ 57 \quad$ b. $x-24=37 ; x=61$
6. a. $2,000 \quad 1,750 \quad 1,500 \quad 1,250 \quad 1,000 \quad 750 \quad 500 \quad 250$
b. $200,500,800,1100,1400,1700$
7. In the frequency table we list how many students got that score.

| Quiz score | Frequency |
| :---: | :---: |
| 1 | 0 |
| 2 | 1 |
| 3 | 0 |
| 4 | 1 |
| 5 | 3 |
| 6 | 5 |
| 7 | 5 |
| 8 | 4 |
| 9 | 3 |
| 10 | 2 |


8.

Rubber boots used to cost $\$ 27.95$ but now the price is $\$ 21.45$. How much is the discount?
$\$ 21.45+x=\$ 27.95$ OR $\quad x=\$ 27.95-\$ 21.45$

$$
\longleftarrow \text { original price } \$ 27.95 \longrightarrow
$$

| $\$ 21.45$ | $x$ |
| :--- | :--- | $x=\$ 6.50$

9. a. 1,999
b. 4,980
c. 5,700
$\begin{array}{ll}\text { 10. a. } 800,050 & \text { b. } 25,407\end{array}$
10. a. 30,000
b. 9,000
c. 600
11. a. $<$
b. $>$
c. $>$
12. 27,200 $217,200 \quad 227,200 \quad 227,712$
13. a. 440,000
b. 90,000
c. 27,500
14. a. 430,000
b. 500,000
c. 10,000
15. a. 501,663
b. 323,688
$\begin{array}{llllll}\text { 17. a. } 210 & \text { b. } 4,800 & \text { c. } 3,200 & \text { d. } 120 & \text { e. } 80 & \text { f. } 70\end{array}$
16. a. $\$ 160$
b. $\$ 800$
c. four days, since $4 \times \$ 160=\$ 640$
17. 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
18. 


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: $4 \times 375 \mathrm{~cm}=1,500 \mathrm{~cm}$. Or, $375 \mathrm{~cm}+375 \mathrm{~cm}+375 \mathrm{~cm}+375 \mathrm{~cm}=1,500 \mathrm{~cm}$
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. $51 / 4 \mathrm{in}$. or 13 cm 3 mm .13 cm 4 mm is also acceptable. b. $37 / 8 \mathrm{in}$. or 9 cm 8 mm .9 cm 9 mm is also acceptable.
23. 6 hours 12 minutes
24. $1 \mathrm{~h} 45 \mathrm{~min}+50 \mathrm{~min}+1 \mathrm{~h} 15 \mathrm{~min}+2 \mathrm{~h} 15 \mathrm{~min}+55 \mathrm{~min}=4 \mathrm{~h} 180 \mathrm{~min}$, which is 7 hours.
25. She worked 7 hours 30 minutes. From 7:00 am till $3: 35 \mathrm{pm}$ is 8 hours 35 minutes. Subtract from that 65 minutes, or 1 hour 5 minutes, to get 7 hours 30 minutes.
26.

| a. | b. | c. |
| :---: | :--- | :--- |
| $6 \mathrm{lb}=96 \mathrm{oz}$ | $5 \mathrm{gal}=20 \mathrm{qt}$ | $4 \mathrm{ft} 2 \mathrm{in} .=50 \mathrm{in}$. |
| $2 \mathrm{lb} 11 \mathrm{oz}=43 \mathrm{oz}$ | $2 \mathrm{qt}=8 \mathrm{cups}$ | $7 \mathrm{yd}=21 \mathrm{ft}$ |

27. 

| a. | b. | c. |
| :--- | :--- | :--- |
| $2 \mathrm{~kg}=2,000 \mathrm{~g}$ |  |  |
| $11 \mathrm{~kg} 600 \mathrm{~g}=11,600 \mathrm{~g}$ |  |  |$\quad$| $5 \mathrm{~L} 200 \mathrm{ml}=5,200 \mathrm{ml}$ |
| :--- |
| $3 \mathrm{~m}=300 \mathrm{~cm}$ |$\quad$| $8 \mathrm{~cm} 2 \mathrm{~mm}=82 \mathrm{~mm}$ |
| :--- |
| $10 \mathrm{~km}=10,000 \mathrm{~m}$ |

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 $\quad$ b. 8 R1 $\quad$ 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. $117 \div 6=19 \mathrm{R} 3$. Notice she needs a bag also for the three muffins that don't fill a bag.
35. 

| number | divisible <br> by 1 | divisible <br> by 2 | divisible <br> by 3 | divisible <br> by 4 | divisible <br> by 5 | divisible <br> by 6 | divisible <br> by 7 | divisible <br> by 8 | divisible <br> by 9 | divisible <br> by 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 80 | x | x |  | x |  |  |  | x |  | x |
| 75 | x |  | x |  | x |  |  |  |  |  |
| 47 | x |  |  |  |  |  |  |  |  |  |

36. 

| a. Is 5 a factor of $60 ?$ | b. Is 7 a divisor of $43 ?$ |
| :--- | :--- |
| $\underline{\text { Yes }, ~ b e c a u s e ~} \underline{5} \times \underline{12}=\underline{60}$. | $\underline{\text { No }, \text { because } \underline{43} \div \underline{7}=6 \mathrm{R} 1 \text { (the division is not even). }}$ |
| c. Is 96 divisible by $4 ?$ | d. Is 34 a multiple of $7 ?$ <br> Yes, because $96 \div 4=24$ <br> No because 34 is not in the multiplication table of 7. <br> OR: No, because $34 \div 7=4 R 6 ;$ the division is not even. <br> 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:

2357111317192329313741434753596167717379838997
38. a. 1, 2, 4, 7, 8, 14, 28, 56 b. $1,2,3,6,13,26,39,78$
39. $155^{\circ}$
40. Check students' answers.

41. Answers vary. Check students' answers. The sum of the angle measures should be $180^{\circ}$ or very close.
42. $29^{\circ}+x=180^{\circ} ; \quad x=151^{\circ}$.

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

45.

46. Use subtraction. $\mathrm{A}=28 \mathrm{ft} \times 12 \mathrm{ft}-6 \mathrm{ft} \times 10 \mathrm{ft}=336 \mathrm{ft}^{2}-60 \mathrm{ft}^{2}=276 \mathrm{ft}^{2}$.
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. $12 / 5 \quad$ b. $5 / 6 \quad$ c. 6
50.

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. $>\quad$ b. $>\quad$ c. $<\quad$ d. $<$
53. $\frac{65}{100}<\frac{7}{10}<\frac{5}{4}$
54. $21 / 4$ cups
55. a. $1 / 8$
b. $13 / 5$
c. $12 / 12$
56.

$\begin{array}{llll}\text { 57. a. } 0.3 & \text { b. } 3.9 & \text { c. } 0.09 & \text { d. } 7.45\end{array}$
58. a. 6/10
b. $67 / 10$
$\begin{array}{ll}\text { c. } 21 / 100 & \text { d. } 55 / 100\end{array}$
59. a. $<$
b. $>$
c. $<$
d. $=$
60. a. 13.01
b. 3.74

