



New York State Testing Program

Mathematics Test

Grade **4**

2009 Scoring Guide Part 2

48

Mr. Blake ordered 12 boxes of paintbrushes. There were 8 paintbrushes in each box. How many paintbrushes did Mr. Blake order in all?

Show your work.

Answer _____ paintbrushes

Mr. Blake opened some of the boxes of paintbrushes when they arrived. There was a total of 24 paintbrushes in the boxes he opened. How many boxes did Mr. Blake open?

Answer _____ boxes

QUESTION 48

STRAND 1: NUMBER SENSE AND OPERATIONS

Complete and Correct Response:

- $8 \times 12 = 96$

OR other valid process

AND

- 96 (paintbrushes)

AND

- 3 (boxes)

Score Points:

Apply 3-point holistic rubric.

48

Mr. Blake ordered 12 boxes of paintbrushes. There were 8 paintbrushes in each box. How many paintbrushes did Mr. Blake order in all?

Show your work.

$$\begin{array}{r}
 12 \text{ boxes of paintbrushes} \\
 \times 8 \text{ paintbrushes} \\
 \hline
 96 \text{ paintbrushes}
 \end{array}$$

$$\begin{array}{r}
 12 \text{ boxes of paintbrushes} \\
 \overline{) 96 \text{ paintbrushes}} \\
 \underline{16} \\
 16 \\
 \underline{- 16} \\
 00
 \end{array}$$

Answer 96 paintbrushes

Mr. Blake opened some of the boxes of paintbrushes when they arrived. There was a total of 24 paintbrushes in the boxes he opened. How many boxes did Mr. Blake open?

Answer 3 boxes

$$\begin{array}{r}
 8 \text{ paintbrushes} \\
 \times 3 \text{ boxes} \\
 \hline
 24 \text{ paintbrushes}
 \end{array}$$

$$24 \text{ paintbrushes} \div 8 \text{ paintbrushes} = 3 \text{ boxes}$$

This response is complete and correct.

Score Point 3

- 48 Mr. Blake ordered 12 boxes of paintbrushes. There were 8 paintbrushes in each box. How many paintbrushes did Mr. Blake order in all?

Show your work.

$$\begin{array}{r} 8 \\ 0 \\ 12 \\ \hline 96 \end{array}$$

$$\begin{array}{r} 12 \\ 0 \\ 8 \\ \hline 96 \end{array}$$

Answer 96 paintbrushes

Mr. Blake opened some of the boxes of paintbrushes when they arrived. There was a total of 24 paintbrushes in the boxes he opened. How many boxes did Mr. Blake open?

Answer 3 boxes

$$\begin{array}{r} 8 \\ 8 \\ + 8 \\ \hline 24 \end{array}$$

$$\begin{array}{r} 8 \\ + 8 \\ \hline 16 \\ + 8 \\ \hline 24 \end{array}$$

This response is complete and correct.

Score Point 3

48

Mr. Blake ordered 12 boxes of paintbrushes. There were 8 paintbrushes in each box. How many paintbrushes did Mr. Blake order in all?

Show your work.

Handwritten work showing 12 boxes, each containing the number 8. Below this, the equation $8 \times 8 = 96$ is written, with the 8s in boxes.

Answer 96 paintbrushes

Mr. Blake opened some of the boxes of paintbrushes when they arrived. There was a total of 24 paintbrushes in the boxes he opened. How many boxes did Mr. Blake open?

Answer 4 boxes

This response is partially correct. The first answer is correct, and a sound procedure is demonstrated; however, the second answer is incorrect.

Score Point 2

48 Mr. Blake ordered 12 boxes of paintbrushes. There were 8 paintbrushes in each box. How many paintbrushes did Mr. Blake order in all?

Show your work.

The student has drawn 12 boxes, each containing 8 paintbrushes. Below each box is a handwritten number representing the count of paintbrushes in that box. The numbers are: 8, 16, 24, 32, 40, 48, 56, 64, 72, 79, 87, and 95. Below the boxes, the student has written "Answer 96 paintbrushes".

Mr. Blake opened some of the boxes of paintbrushes when they arrived. There was a total of 24 paintbrushes in the boxes he opened. How many boxes did Mr. Blake open?

Answer 3 boxes

This response is partially correct. The work shown for the first answer is acceptable; however, it contains a calculation error, resulting in an incorrect answer. The second answer is correct.

Score Point 2

- 48 Mr. Blake ordered 12 boxes of paintbrushes. There were 8 paintbrushes in each box. How many paintbrushes did Mr. Blake order in all?

Show your work.

$$\begin{array}{r} 1 \\ 12 \\ \times 8 \\ \hline 86 \end{array}$$

Answer 86 paintbrushes

Mr. Blake opened some of the boxes of paintbrushes when they arrived. There was a total of 24 paintbrushes in the boxes he opened. How many boxes did Mr. Blake open?

Answer 32 boxes

$$\begin{array}{r} 1 \\ 24 \\ \div 8 \\ \hline 32 \end{array}$$

This response demonstrates only a limited understanding of the mathematical concepts embodied in the task. A sound mathematical procedure is demonstrated for the first answer; however, a calculation error results in an incorrect answer. The second answer is incorrect.

Score Point 1

- 48 Mr. Blake ordered 12 boxes of paintbrushes. There were 8 paintbrushes in each box. How many paintbrushes did Mr. Blake order in all?

Show your work.

$$\begin{array}{r} 12 \\ + 8 \\ \hline 20 \end{array}$$

Answer 20 paintbrushes

Mr. Blake opened some of the boxes of paintbrushes when they arrived. There was a total of 24 paintbrushes in the boxes he opened. How many boxes did Mr. Blake open?

Answer 16 boxes

$$\begin{array}{r} 24 \\ - 8 \\ \hline 16 \end{array}$$

This response is incorrect.

Score Point 0



New York State Testing Program

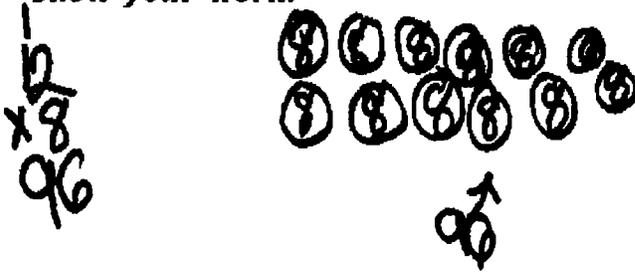
Mathematics Test

Grade **4**

2009 Practice Set

- 48 Mr. Blake ordered 12 boxes of paintbrushes. There were 8 paintbrushes in each box. How many paintbrushes did Mr. Blake order in all?

Show your work.



Answer 96 paintbrushes

Mr. Blake opened some of the boxes of paintbrushes when they arrived. There was a total of 24 paintbrushes in the boxes he opened. How many boxes did Mr. Blake open?

Answer 3 boxes

48

Mr. Blake ordered 12 boxes of paintbrushes. There were 8 paintbrushes in each box. How many paintbrushes did Mr. Blake order in all?

Show your work.

$$\begin{array}{r} 12 \\ \times 8 \\ \hline 40 \end{array}$$

Answer 40 paintbrushes

Mr. Blake opened some of the boxes of paintbrushes when they arrived. There was a total of 24 paintbrushes in the boxes he opened. How many boxes did Mr. Blake open?

Answer 4 boxes

48

Mr. Blake ordered 12 boxes of paintbrushes. There were 8 paintbrushes in each box. How many paintbrushes did Mr. Blake order in all?

Show your work.

$$\begin{array}{r} 12 \\ \times 8 \\ \hline 96 \\ \hline 72 \end{array}$$

$$\begin{array}{r} 12^{RO} \\ 8 \overline{) 96} \\ \underline{-8} \\ 16 \\ \underline{-16} \\ 0 \end{array}$$

$$\begin{array}{r} 8 \\ \times 12 \\ \hline 72 \end{array}$$

$$3 \overline{) 72}^9$$

$$\begin{array}{r} 12 \\ \times 2 \\ \hline 24 \end{array}$$

$$\begin{array}{r} 12 \\ \times 2 \\ \hline 24 \end{array}$$

$$\begin{array}{r} 12 \\ \times 2 \\ \hline 24 \end{array}$$

Answer 96 paintbrushes

Mr. Blake opened some of the boxes of paintbrushes when they arrived. There was a total of 24 paintbrushes in the boxes he opened. How many boxes did Mr. Blake open?

Answer 10 boxes

48

Mr. Blake ordered 12 boxes of paintbrushes. There were 8 paintbrushes in each box. How many paintbrushes did Mr. Blake order in all?

Show your work.

$$\begin{array}{r} 12 \\ + 8 \\ \hline 20 \end{array}$$
$$\begin{array}{r} 12 \\ + 8 \\ \hline 20 \end{array}$$

Answer 20 paintbrushes

Mr. Blake opened some of the boxes of paintbrushes when they arrived. There was a total of 24 paintbrushes in the boxes he opened. How many boxes did Mr. Blake open?

Answer 56 boxes

$$\begin{array}{r} 24 \\ \times 24 \\ \hline 56 \end{array}$$

Score Point: 0

This response is incorrect.

48

Mr. Blake ordered 12 boxes of paintbrushes. There were 8 paintbrushes in each box. How many paintbrushes did Mr. Blake order in all?

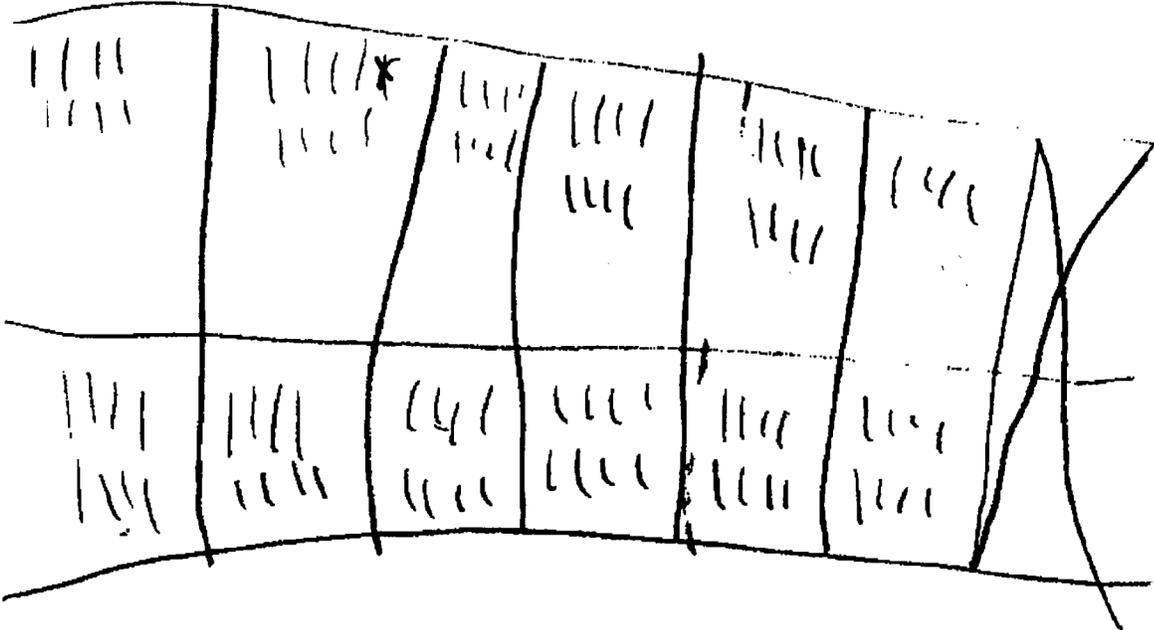
Show your work.

work
↓

Answer 87 paintbrushes

Mr. Blake opened some of the boxes of paintbrushes when they arrived. There was a total of 24 paintbrushes in the boxes he opened. How many boxes did Mr. Blake open?

Answer 6 boxes



Score Point: 1

This response demonstrates only a limited understanding of the mathematical concepts embodied in the task. A valid grouping procedure is used; however, both answers are incorrect.

4TH GRADE MATHEMATICS

Name: _____

PRACTICE SET ANSWER KEY

PS 1	(0-2)	
PS 2	(0-2)	
PS 3	(0-2)	
PS 4	(0-2)	
PS 5	(0-2)	
PS 6	(0-2)	
PS 7	(0-2)	
PS 8	(0-2)	
PS 9	(0-2)	
PS 10	(0-2)	
PS 11	(0-2)	
PS 12	(0-2)	
PS 13	(0-2)	
PS 14	(0-2)	
PS 15	(0-2)	
PS 16	(0-2)	
PS 17	(0-2)	
PS 18	(0-2)	
PS 19	(0-2)	
PS 20	(0-2)	
PS 21	(0-2)	
PS 22	(0-2)	
PS 23	(0-2)	
PS 24	(0-2)	
PS 25	(0-2)	

PS 26	(0-2)	
PS 27	(0-2)	
PS 28	(0-2)	
PS 29	(0-2)	
PS 30	(0-2)	
PS 31	(0-2)	
PS 32	(0-2)	
PS 33	(0-2)	
PS 34	(0-2)	
PS 35	(0-2)	
PS 36	(0-3)	
PS 37	(0-3)	
PS 38	(0-3)	
PS 39	(0-3)	
PS 40	(0-3)	
PS 41	(0-3)	
PS 42	(0-3)	
PS 43	(0-3)	
PS 44	(0-3)	
PS 45	(0-3)	
PS 46	(0-2)	
PS 47	(0-2)	
PS 48	(0-2)	
PS 49	(0-2)	
PS 50	(0-2)	

4TH GRADE MATHEMATICS

Name: _____

PRACTICE SET ANSWER KEY

PS 51	(0-2)	
PS 52	(0-2)	
PS 53	(0-2)	
PS 54	(0-2)	
PS 55	(0-2)	
PS 56	(0-2)	
PS 57	(0-2)	
PS 58	(0-2)	
PS 59	(0-2)	
PS 60	(0-2)	
PS 61	(0-2)	
PS 62	(0-2)	
PS 63	(0-2)	
PS 64	(0-2)	
PS 65	(0-2)	
PS 66	(0-2)	
PS 67	(0-2)	
PS 68	(0-2)	
PS 69	(0-2)	
PS 70	(0-2)	

PS 71	(0-2)	
PS 72	(0-2)	
PS 73	(0-2)	
PS 74	(0-2)	
PS 75	(0-2)	
PS 76	(0-2)	
PS 77	(0-2)	
PS 78	(0-2)	
PS 79	(0-2)	
PS 80	(0-2)	
PS 81	(0-3)	
PS 82	(0-3)	
PS 83	(0-3)	
PS 84	(0-3)	
PS 85	(0-3)	
PS 86	(0-3)	
PS 87	(0-3)	
PS 88	(0-3)	
PS 89	(0-3)	
PS 90	(0-3)	