



# ***New York State Testing Program***

## **Mathematics Test**

Grade **6**

**2009 Scoring Guide**

**35** Donnie is autographing baseball items.

He has a total of 320 baseball cards to sign. He has signed 14 cards so far. The equation below can be used to determine the number of baseball cards,  $c$ , Donnie still needs to sign.

$$14 + c = 320$$

What is the number of baseball cards Donnie still needs to sign?

**Show your work.**

**Answer** \_\_\_\_\_ baseball cards

He also signs 300 baseballs, which are stored in 15 boxes. Donnie uses the equation below to determine the number of baseballs,  $b$ , in each box.

$$15b = 300$$

How many baseballs are in each box?

**Answer** \_\_\_\_\_ baseballs

**QUESTION 35**

**STRAND 2: ALGEBRA**

*Complete and Correct Response:*

- $14 + c = 320$   
 $14 + c - 14 = 320 - 14$   
 $c = 306$

OR other valid process

**AND**

- 306 (baseball cards)

**AND**

- 20 (baseballs)

*Score Points:*

Apply 3-point holistic rubric.

**35**

Donnie is autographing baseball items.

He has a total of 320 baseball cards to sign. He has signed 14 cards so far. The equation below can be used to determine the number of baseball cards,  $c$ , Donnie still needs to sign.

$$14 + c = 320$$

What is the number of baseball cards Donnie still needs to sign?

*Show your work.*

$$14 + c = 320$$

$$\begin{array}{r} \phantom{0}^{\text{h}} \phantom{0}^{\text{t}} \\ 320 \\ - 14 \\ \hline 306 \end{array}$$

*Answer* 306 baseball cards

He also signs 300 baseballs, which are stored in 15 boxes. Donnie uses the equation below to determine the number of baseballs,  $b$ , in each box.

$$15b = 300$$

How many baseballs are in each box?

$$\begin{array}{r} 20 \\ 15 \overline{)300} \\ - 300 \\ \hline 000 \end{array}$$

*Answer* 20 baseballs

This response is complete and correct.

**Score Point 3**

**35**

Donnie is autographing baseball items.

He has a total of 320 baseball cards to sign. He has signed 14 cards so far. The equation below can be used to determine the number of baseball cards,  $c$ , Donnie still needs to sign.

$$14 + c = 320$$

What is the number of baseball cards Donnie still needs to sign?

*Show your work.*

$$\begin{array}{r} 14 \\ 306 \\ \hline 320 \end{array}$$

*Answer* \_\_\_\_\_ 306 baseball cards

He also signs 300 baseballs, which are stored in 15 boxes. Donnie uses the equation below to determine the number of baseballs,  $b$ , in each box.

$$15b = 300$$

How many baseballs are in each box?

*Answer* \_\_\_\_\_ 20 baseballs

$$\begin{array}{r} 15 \\ 20 \\ \hline 300 \\ 30 \\ \hline 300 \end{array}$$

This response is complete and correct.

**Score Point 3**

**35**

Donnie is autographing baseball items.

He has a total of 320 baseball cards to sign. He has signed 14 cards so far. The equation below can be used to determine the number of baseball cards,  $c$ , Donnie still needs to sign.

$$14 + c = 320$$

What is the number of baseball cards Donnie still needs to sign?

*Show your work.*

$$\begin{array}{r} 320 \\ - 14 \\ \hline 306 \end{array}$$

Answer 306 baseball cards

He also signs 300 baseballs, which are stored in 15 boxes. Donnie uses the equation below to determine the number of baseballs,  $b$ , in each box.

$$15b = 300$$

How many baseballs are in each box?

Answer ~~300~~ baseballs

$$\begin{array}{r} 20 \\ 15 \overline{) 300} \\ \underline{- 300} \\ 000 \end{array}$$

$$\begin{array}{r} 15 \\ \times 20 \\ \hline 00 \\ 300 \\ \hline 300 \end{array}$$

$$\begin{array}{r} 20 \\ \times 15 \\ \hline 75 \end{array} \quad 15$$

This response is partially correct. A sound mathematical procedure is demonstrated for determining the number of baseball cards that still need to be signed and a correct answer is provided; however, the answer for how many baseballs in each box is incorrect.

**Score Point 2**

**35**

Donnie is autographing baseball items.

He has a total of 320 baseball cards to sign. He has signed 14 cards so far. The equation below can be used to determine the number of baseball cards,  $c$ , Donnie still needs to sign.

$$14 + c = 320$$

What is the number of baseball cards Donnie still needs to sign?

*Show your work.*

$$\begin{array}{r} 320 \\ - 14 \\ \hline 106 \end{array} \quad \begin{array}{r} 106 \\ + 14 \\ \hline 20 \end{array}$$

Answer 106 baseball cards

He also signs 300 baseballs, which are stored in 15 boxes. Donnie uses the equation below to determine the number of baseballs,  $b$ , in each box.

$$15b = 300$$

$$\begin{array}{r} 300 \\ 15 \end{array}$$

How many baseballs are in each box?

Answer 285 baseballs

$$\begin{array}{r} 300 \\ - 15 \\ \hline 285 \end{array} \quad \begin{array}{r} 11 \\ 285 \\ + 15 \\ \hline 300 \end{array}$$

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

**Score Point 1**

**35** Donnie is autographing baseball items.

He has a total of 320 baseball cards to sign. He has signed 14 cards so far. The equation below can be used to determine the number of baseball cards,  $c$ , Donnie still needs to sign.

$$14 + c = 320$$

What is the number of baseball cards Donnie still needs to sign?

*Show your work.*

$$320 + c + 14 = 34$$

*Answer* 34 baseball cards

He also signs 300 baseballs, which are stored in 15 boxes. Donnie uses the equation below to determine the number of baseballs,  $b$ , in each box.

$$15b = 300$$

How many baseballs are in each box?

*Answer* 41 baseballs

This response is incorrect.

**Score Point 0**



---

# ***New York State Testing Program***

---

## **Mathematics Test**

Grade **6**

**2009 Practice Set**

**35**

Donnie is autographing baseball items.

He has a total of 320 baseball cards to sign. He has signed 14 cards so far. The equation below can be used to determine the number of baseball cards,  $c$ , Donnie still needs to sign.

$$14 + c = 320$$

What is the number of baseball cards Donnie still needs to sign?

*Show your work.*

$$\begin{array}{r} 320 \\ - 14 \\ \hline 302 \end{array}$$

**Answer** 302 baseball cards

He also signs 300 baseballs, which are stored in 15 boxes. Donnie uses the equation below to determine the number of baseballs,  $b$ , in each box.

$$15b = 300$$

How many baseballs are in each box?

**Answer** 30 baseballs

**35**

Donnie is autographing baseball items.

He has a total of 320 baseball cards to sign. He has signed 14 cards so far. The equation below can be used to determine the number of baseball cards,  $c$ , Donnie still needs to sign.

$$14 + c = 320$$

What is the number of baseball cards Donnie still needs to sign?

*Show your work.*

$$14 + c = 320 - 14 = 306$$

$$\begin{array}{r} 320 \\ - 14 \\ \hline 306 \end{array}$$

Answer 306 baseball cards

He also signs 300 baseballs, which are stored in 15 boxes. Donnie uses the equation below to determine the number of baseballs,  $b$ , in each box.

$$15b = 300$$

How many baseballs are in each box?

Answer 20 baseballs

$$\begin{array}{r} 15 \overline{) 300} \\ \underline{300} \\ 0 \end{array}$$

35

Donnie is autographing baseball items.

He has a total of 320 baseball cards to sign. He has signed 14 cards so far. The equation below can be used to determine the number of baseball cards,  $c$ , Donnie still needs to sign.

$$14 + c = 320$$

What is the number of baseball cards Donnie still needs to sign?

Show your work.

$$\begin{array}{r}
 320 \\
 + 14 \\
 \hline
 334
 \end{array}$$

Answer 334 baseball cards

He also signs 300 baseballs, which are stored in 15 boxes. Donnie uses the equation below to determine the number of baseballs,  $b$ , in each box.

$$15b = 300$$

How many baseballs are in each box?

Answer 4500 baseballs

$$\begin{array}{r}
 300 \\
 \begin{array}{|c|c|c|} \hline 0 & 3 & 0 \\ \hline 4 & 5 & 0 \\ \hline \end{array} \\
 \hline
 5100
 \end{array}$$

35

Donnie is autographing baseball items.

He has a total of 320 baseball cards to sign. He has signed 14 cards so far. The equation below can be used to determine the number of baseball cards,  $c$ , Donnie still needs to sign.

$$14 + c = 320$$

What is the number of baseball cards Donnie still needs to sign?

Show your work.

$$\begin{array}{r} 14 \\ \times 22 \\ \hline 28 \\ + 280 \\ \hline 308 \\ + 12 \\ \hline 320 \end{array}$$

$$\begin{array}{r} 14 \\ \times 22 \\ \hline 28 \\ + 280 \\ \hline 308 \\ + 12 \\ \hline 320 \end{array}$$

$$\begin{array}{r} 3 \\ \times 14 \\ \hline 126 \\ + 140 \\ \hline 366 \end{array}$$

$$\begin{array}{r} \times 14 \\ 9 \\ \hline 126 \end{array}$$

$$\begin{array}{r} 37 \\ \times 4 \\ \hline 148 \\ + 140 \\ \hline 512 \end{array}$$

$$\begin{array}{r} \times 14 \\ 22 \\ \hline 280 \end{array}$$

$$\begin{array}{r} 22 \\ 14 \overline{) 308} \\ \underline{308} \\ 0 \end{array}$$

$$\begin{array}{r} + 20 \\ + 14 \\ + 12 \\ \hline 46 \end{array}$$

Answer 22 baseball cards

He also signs 300 baseballs, which are stored in 15 boxes. Donnie uses the equation below to determine the number of baseballs,  $b$ , in each box.

$$15b = 300$$

How many baseballs are in each box?

Answer 20 baseballs

$$\begin{array}{r} 20 \\ 15 \overline{) 300} \\ \underline{300} \\ 0 \end{array}$$

$$\begin{array}{r} \times 15 \\ 20 \\ \hline 300 \end{array}$$

$$\begin{array}{r} \times 15 \\ 20 \\ \hline 300 \\ + 300 \\ \hline 300 \end{array}$$

**35**

Donnie is autographing baseball items.

He has a total of 320 baseball cards to sign. He has signed 14 cards so far. The equation below can be used to determine the number of baseball cards,  $c$ , Donnie still needs to sign.

$$14 + c = 320$$

What is the number of baseball cards Donnie still needs to sign?

Show your work.

$$\begin{array}{r} 14 + c = 320 \\ - 14 \quad - 14 \\ \hline c = 306 \end{array}$$

$$\begin{array}{r} 320 \\ - 14 \\ \hline 306 \\ + 14 \\ \hline 320 \end{array}$$

Answer 306 baseball cards

He also signs 300 baseballs, which are stored in 15 boxes. Donnie uses the equation below to determine the number of baseballs,  $b$ , in each box.

$$15b = 300$$

How many baseballs are in each box?

Answer 20 baseballs

$$\begin{array}{r} 15b = 300 \\ \hline 15 \quad 15 \end{array}$$

$$\begin{array}{r} 20 \\ 15 \overline{) 300} \\ \underline{30} \\ \text{XXX} \end{array}$$

# 6<sup>th</sup> GRADE MATHEMATICS

Name: \_\_\_\_\_

## PRACTICE SET ANSWER KEY

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

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