

Unit Pre-Assessment

Grade 5, Unit 2: Developing multiplication and division strategies

1. Green's Cow Farm currently has 280 cows. Each cow produces at least 15 quarts of milk a day. What is the least amount of milk the farm can produce in a day?

_____ quarts of milk

2. Jeremiah is bundling letters together so his office can mail them out. He will put 18 letters in each bundle. If he has 324 letters, how many bundles can he make? Circle ALL of the equations that could be used to solve the problem.

$324 \div 18 = ?$

$? \times 18 = 324$

$18 \times ? = 324$

$324 \times 18 = ?$

3. Mary sold 117 boxes of cookies. Her cousin, Claire, sold 4 times as many boxes as Mary. How many boxes of cookies did Claire sell?

4. Solve for n using a strategy of your choice. Select the correct answer.

$$264 \div 12 = n$$

A. $n = 24$

B. $n = 22$

C. $n = 111$

D. $n = 220$

5. Jerome used the area model to solve $1,260 \div 20$. Fill in the four missing blanks to help finish this problem.

_____	_____	_____	
20	1000	200	60

$1,260 \div 20 = \underline{\hspace{2cm}}$

6. Look at Richard and Cory's strategies. List two ways they are the same AND two ways they are different.

Richard:

$$\begin{array}{r} ^2 \\ 34 \\ \times 27 \\ \hline 238 \\ 680 \\ \hline 918 \end{array}$$

Cory:

$$\begin{array}{r} 34 \text{ (30 + 4)} \\ \times 27 \text{ (20 + 7)} \\ \hline 28 \text{ (7 \times 4)} \\ 201 \text{ (7 \times 30)} \\ 80 \text{ (20 \times 4)} \\ + 600 \text{ (20 \times 30)} \\ \hline 918 \end{array}$$

7. Julie solved a multiplication problem correctly using the standard algorithm. Which of the following could be used to find the same solution as Julie? Circle the correct answers.

<table style="margin-left: auto; margin-right: auto;"> <tr> <td></td> <td style="text-align: center;">5</td> <td style="text-align: center;">+</td> <td style="text-align: center;">3</td> <td></td> </tr> <tr> <td style="padding-right: 5px;">3</td> <td style="border: 1px solid black; padding: 5px;">15</td> <td style="padding: 0 5px;"> </td> <td style="border: 1px solid black; padding: 5px;">9</td> <td></td> </tr> <tr> <td style="padding-right: 5px;">+</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="padding-right: 5px;">2</td> <td style="border: 1px solid black; padding: 5px;">10</td> <td style="padding: 0 5px;"> </td> <td style="border: 1px solid black; padding: 5px;">6</td> <td></td> </tr> </table>		5	+	3		3	15		9		+					2	10		6		$(2 \times 53) + (3 \times 53)$
	5	+	3																		
3	15		9																		
+																					
2	10		6																		
$50 \times 30 = 1,500$ $3 \times 2 = 6$	$3 \times 2 = 6$ $2 \times 50 = 100$ $30 \times 3 = 90$ $30 \times 50 = 1,500$																				

Julie's Strategy

53
× 32

106
+ 1,590

1,696

