

Lesson 2 Answers

L.O: I am learning to reason and solve problems involving the four operations.

Try your best – it is all we can ask for! 😊

<p>Key vocabulary: addition, subtraction, multiplication, division, calculate, find, missing, inverse, operation, reasoning, solve, difference.</p>	<p>Your answer</p>																																				
<p style="text-align: center;">Here is a bar model.</p> <table border="1" style="margin: auto;"> <tr> <td style="width: 20px; height: 20px; background-color: #fff9c4;">A</td> <td style="width: 20px; height: 20px; background-color: #ffe0b2;">B</td> </tr> <tr> <td colspan="2" style="text-align: center; background-color: #c8e6c9;">531, 255</td> </tr> </table> <p>A is an odd number which rounds to 100,000 to the nearest ten thousand. It has a digit total of 30.</p> <p>B is an even number which rounds to 400,000 to the nearest hundred thousand. I has a digit total of 9.</p> <p>A and B are both multiples of 5 but end in different digits.</p> <p style="text-align: center; color: purple;">What are possible values of A and B?</p>	A	B	531, 255		<p style="color: red; font-size: 1.2em;">A = 99,255</p> <p style="color: red; font-size: 1.2em;">B = 432,000</p>																																
A	B																																				
531, 255																																					
<p style="text-align: center; background-color: #4caf50; color: white; padding: 5px;">Place the digits in the boxes to make the largest product.</p> <div style="display: flex; justify-content: space-around; margin: 10px 0;"> <div style="border: 1px solid #ccc; border-radius: 10px; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center;">1</div> <div style="border: 1px solid #ccc; border-radius: 10px; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center;">2</div> <div style="border: 1px solid #ccc; border-radius: 10px; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center;">3</div> <div style="border: 1px solid #ccc; border-radius: 10px; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center;">4</div> <div style="border: 1px solid #ccc; border-radius: 10px; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center;">6</div> <div style="border: 1px solid #ccc; border-radius: 10px; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center;">7</div> </div> <table border="1" style="margin: auto; border-collapse: collapse;"> <tr> <td style="width: 30px; height: 30px;"></td> <td style="width: 30px; height: 30px;"></td> <td style="width: 30px; height: 30px;"></td> <td style="width: 30px; height: 30px;"></td> <td style="width: 30px; height: 30px;"></td> <td style="width: 30px; height: 30px;"></td> </tr> <tr> <td style="text-align: center;">x</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="border-top: 2px solid black;"></td> <td style="border-top: 2px solid black;"></td> <td style="border-top: 2px solid black;"></td> <td style="border-top: 2px solid black;"></td> <td style="border-top: 2px solid black;"></td> <td style="border-top: 2px solid black;"></td> </tr> </table>							x												<table border="1" style="margin: auto; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 30px; height: 30px;"></td> <td style="width: 30px; height: 30px;"></td> <td style="width: 30px; height: 30px; color: red;">7</td> <td style="width: 30px; height: 30px; color: red;">3</td> <td style="width: 30px; height: 30px; color: red;">2</td> <td style="width: 30px; height: 30px; color: red;">1</td> </tr> <tr> <td style="text-align: center;">x</td> <td></td> <td></td> <td></td> <td style="color: red;">6</td> <td style="color: red;">4</td> </tr> <tr> <td style="border-top: 2px solid black; color: red;">4</td> <td style="border-top: 2px solid black; color: red;">6</td> <td style="border-top: 2px solid black; color: red;">8</td> <td style="border-top: 2px solid black; color: red;">5</td> <td style="border-top: 2px solid black; color: red;">4</td> <td style="border-top: 2px solid black; color: red;">4</td> </tr> </table>			7	3	2	1	x				6	4	4	6	8	5	4	4
x																																					
		7	3	2	1																																
x				6	4																																
4	6	8	5	4	4																																
<p style="text-align: center; background-color: #e67e22; color: white; padding: 5px;">Here are two calculation cards.</p> <div style="border: 1px solid #ccc; border-radius: 15px; padding: 10px; margin: 10px 0;"> <p style="font-size: 1.2em;">A = 506 ÷ 11</p> </div> <div style="border: 1px solid #ccc; border-radius: 15px; padding: 10px; margin: 10px 0;"> <p style="font-size: 1.2em;">B = 845 ÷ 13</p> </div> <p style="text-align: center; color: purple; margin-top: 20px;">Find the difference between A and B.</p>	<p style="color: red; font-size: 1.2em;">506 ÷ 11 = 46</p> <p style="color: red; font-size: 1.2em;">845 ÷ 13 = 65</p> <p style="color: red; font-size: 1.2em;">65 - 46 = 19</p>																																				

Spot the Mistake

$$656 \div 16 =$$

$$\begin{array}{r} 41 \\ 16 \overline{) 656} \\ \underline{- 640} \\ 16 \\ \underline{- 16} \\ 0 \end{array}$$

Trick question – there is no mistake in the calculation.

Which question is harder?

- $1,965 \div 13$
- $1,965 \div 15$

Explain why.

Dividing by 13 is harder as 13 is prime so we can't divide it in smaller parts, and the 13 times table is harder than the 15 times table.

Class 6 are calculating two thousand, six hundred and thirty-three divided by twelve.



Malachi

I know there will be a remainder without calculating.

Is he correct? Explain your answer.

Malachi is correct because 2,633 is odd and 12 is even.

Using the number 3,236, how many numbers up to 20 does it divide by without a remainder.



Is there a pattern?

1, 2, 4

They are all factors of 4.

Calculate:

- $1,248 \div 48$
- $1,248 \div 24$
- $1,248 \div 12$

What did you do each time?

What was your strategy?

What do you notice? Why?