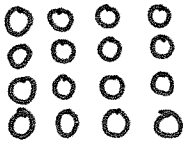
Name Answer Key Number _____

End-of-Module 1 Review

1. Aanya works at a bracelet shop. She sells all different types of bracelets! She sells 16 bracelets in a case. 4 rows fit in a case. Draw an array to show the total number of bracelets in a case.



a. Fill in the missing factor. Write a sentence telling what it represents.

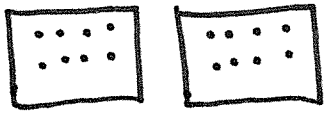
4 x 4 = 16

b. Write a related division sentence to find the number of bracelets in each row.

16 ÷ 4 = 4

2. Aanya packs the **16 bracelets** into boxes of 8.

a. Draw a picture to show how many bracelet boxes Aanya packs. How many boxes of bracelets does she pack? Don't forget to write your sentence.



16 ÷ 8 = 2

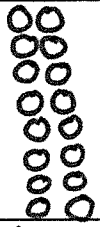
Aanya packs 2 boxes of bracelets

b. Aanya sells **16 necklaces** and packs them into boxes of of 2. Draw a picture to show how many necklace boxes Aanya packs. Don't forget to write your sentence.

16 ÷ 2 = 8

Aanya packs 8 boxes of bracelets

c. Draw an array to represent the amount of **bracelets** Aanya sells. Draw a **second** array to represent the amount of **necklaces** Aanya sells. Explain the relationship between the 2 arrays using **number sentences** and **words.**

~~Earring~~ Array bracelets	Necklace Array
	
Explain: The arrays have the same total, 16. They have the same factors (2 and 8). The factors just switch places. Its the commutative property.	

3. Aimie likes cupcakes! For her birthday party, she decides to get 14 chocolate cupcakes (shown in o's) and 14 vanilla cupcakes (shown with x's). Shown below.

4 x 7 = 28

oooooooo
oooooooo
xxxxxxx
xxxxxxx

(2x7) = 14

(2x7) = 14

14
+14
28

a. Fill in the unknowns in the equation below to match the picture of the cupcakes above. Use the break apart and distribute strategy to find the total number of cupcakes Aimie has for her birthday party.

4 x 7 = (2 x 7) + (2 x 7)

Aimie has 28 cupcakes.

b. Evan decides to bring Aimie **two** more rows of 7 **vanilla cupcakes** to the party.... Shown below. Fill in the unknowns in the equation below to match the new picture. Solve to find the total number of cupcakes.

6 x 7 = (2 x 7) + (4 x 7)

oooooooo
oooooooo
xxxxxxx
Xxxxxxx
xxxxxxx
Xxxxxxx

(2x7) = 14

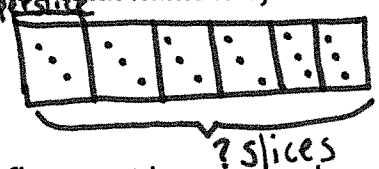
(4x7) = 28

① 14
+ 28
42

There are 42 cupcakes altogether.

4. Mark decides to make his favorite lunch, grilled cheese! His recipe calls for 3 slices of cheese per one sandwich. He makes 6 sandwiches for the family on Friday.

a. How many cheese slices does Mark use to make the 6 sandwiches? **Draw a picture** and **write a multiplication sentence** to find the total number of cheese slices he uses for **6** grilled cheese sandwiches for Friday.



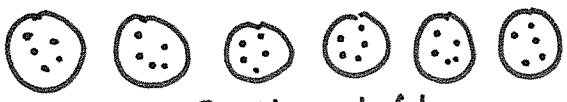
3 x 6 = 18

Mark uses 18 slices of cheese.

b. Mark uses the equation 6 ÷ 3= ___ to figure out how many cheese slices he needs. Is his method correct? Why or why not?

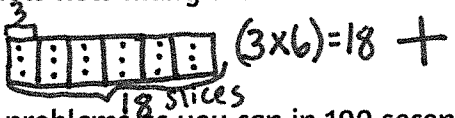
No this method is incorrect. Division always starts with the total. Since we do not know the number of cheese slices all together it is a multiplication problem.

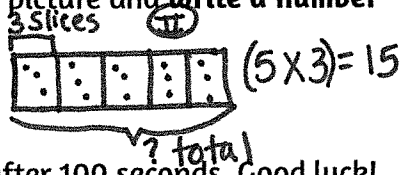
c. If he has a total of **32** cheese slices, how many are left after he makes the 6 grilled cheese sandwiches?



Mark will have 2 slices left over.

d. Mark decides to make 5 more grilled cheese sandwiches on Saturday. What is the **total** number of cheese slices Mark used on both days? Draw a picture and **write a number sentence** to show how many cheese slices Mark used.





① 18 + 15 = 33

Mark used 33 slices of cheese

5. Complete as many problems as you can in 100 seconds. Stop after 100 seconds. Good luck!

3 x 1 = 3	4 ÷ 1 = 4	2 x 5 = 10	2 x 4 = 8	12 ÷ 3 = 4
6 ÷ 2 = 3	4 x 3 = 12	20 ÷ 5 = 4	10 x 4 = 40	1 x 12 = 12
4 x 4 = 16	3 x 3 = 9	5 x 3 = 15	15 ÷ 3 = 5	10 x 2 = 20
8 x 1 = 8	8 ÷ 4 = 2	12 ÷ 4 = 3	5 x 4 = 20	4 x 6 = 24
16 ÷ 8 = 2	14 ÷ 7 = 2	7 x 2 = 14	18 ÷ 6 = 2	3 x 5 = 15
10 x 7 = 70	10 x 9 = 90	14 ÷ 2 = 7	3 x 8 = 24	60 ÷ 10 = 6
32 ÷ 4 = 8	10 x 4 = 40	30 ÷ 10 = 3	5 x 9 = 45	5 x 6 = 30
2 x 9 = 18	3 x 7 = 21	5 x 10 = 50	2 x 6 = 12	14 ÷ 1 = 14
4 x 7 = 28	3 x 7 = 21	21 ÷ 7 = 3	20 ÷ 4 = 5	20 ÷ 2 = 10