Name: KEY

Date: _____

Trimester 2 Third Grade Math Assessment

1. A toy shop is building cars. The table shows how many wheels they will need. *(CC.3.OA.9)*

Wheels Table

Cars	2	3	4	5	6
Wheels	8	a. 12	16	20	b. 24

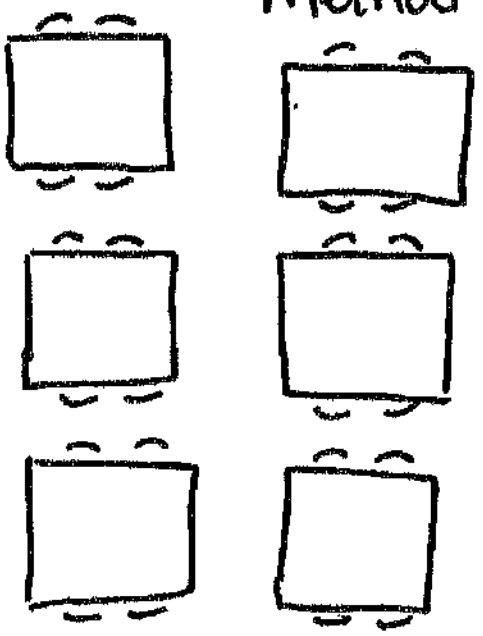
Fill in the empty boxes in the table.

c. Describe a pattern that you see in the Wheels Table.

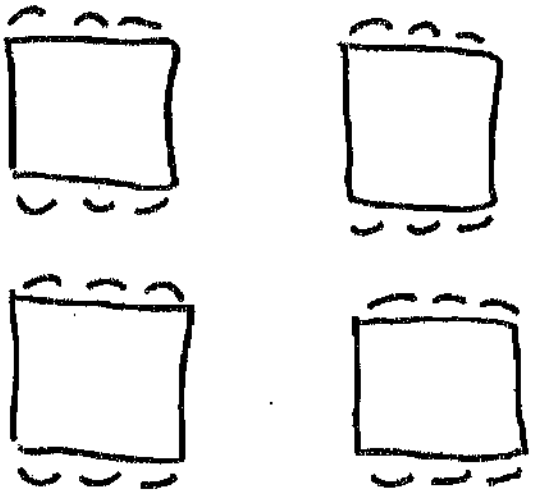
The wheels are being counted by four.

2. Miss Beth has 24 chairs in her classroom. She wants to set up the chairs at tables. Each table can seat up to 6 chairs. She wants an equal number of students to sit at each table. Draw a model of how you would set up the chairs at tables for her. *(CC.3.OA.3)*

Method 1



Method 2



3. Marcus made two arrays with counting cubes to show the Commutative Property of Multiplication. *(CC.3.OA.5)*

Which multiplication sentences are shown by his arrays?

A) $8 \times 2 = 16$ and $2 \times 8 = 16$
B) $3 \times 4 = 12$ and $4 \times 3 = 12$
C) $3 \times 2 = 6$ and $2 \times 3 = 6$
D) $4 \times 5 = 20$ and $5 \times 4 = 20$

4. **a.** Mr. Sneaker divided his reading class into 5 groups.
There are 4 students in each group.
How many students are in Mr. Sneaker's class?
Explain your thinking in words **or** with a drawing. *(CC.3.OA.8)*

5 x 4 = 20 students

b. If 3 new students join the class, how many students will be in his class in all?
Show how you found your answer.

20 + 3 = 23 students

5. Solve the division problem and write the multiplication problem that goes with it. *(CC3.OA.4/3.OA.6)*

a. $45 \div 9 = 5$ b. $18 \div 6 = 3$ c. $27 \div 3 = 9$

$5 \times 9 = 45$ $3 \times 6 = 18$ $9 \times 3 = 27$

6. Timmy is next to the bike racks at school. He sees bikes, tricycles, and skateboards.
He counts 21 wheels.
If 2 of them are skateboards, how many are bikes and how many are tricycles? *(CC.3.OA.8)*
Show your thinking in words **and** with a picture. (Hint: skateboards have 4 wheels)

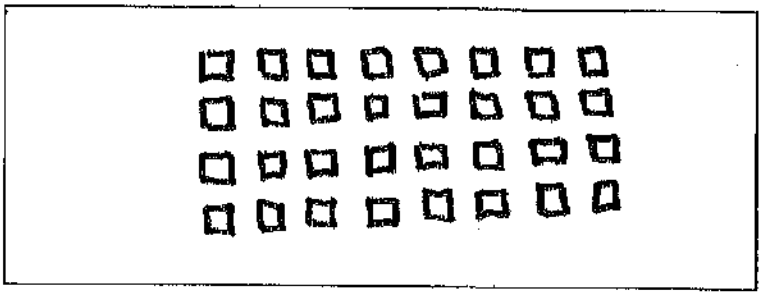
21 - 8 = 13 wheels left   - 2 skateboards

13 - 10 = 3 wheels left      - 5 bicycles

 - 1 tricycle

7. a. Draw an array: *(CC.3.OA.2)*

32 tiles in 4 rows



b. Write a division equation for your array. 32 ÷ 4 = 9

8. Jake and Calvin bought 3 hot dogs for a total of $6.
They earned $10 to buy more hot dogs.
How many more hot dogs can Jake and Calvin buy? *(CC.3.OA.3/3.OA.8)*
Show your thinking below.

$6 ÷ 3 = 2 dollars per hotdog

$10 ÷ $2 = 5 hot dogs

They can buy 5 more hotdogs with $10.

9. Find the unknown factor. *(CC.3.OA.5/3.OA.4/3.OA.6)*

6 x 4 = 24 4 x 6 = 24

Which division equation matches the above equations?

A) 18 ÷ 2 = 9
B) 21 ÷ 3 = 7
C) 24 ÷ 4 = 6
D) 35 ÷ 7 = 5

10. Mr. Hobbs wrote these numbers on the board:

4 9 36

He asked the class to write all the related multiplication and division equations for the set of numbers. *(CC.3.OA.5)*

Which is ***not*** a related equation?

A) 9 x 4 = 36
B) 4 x 9 = 36
C) 36 ÷ 6 = 6
D) 36 ÷ 4 = 9

11. a. Sara has 27 buttons. She wants to sew an equal number of buttons on 3 sweaters.
Using all of her buttons, how many will she put on each sweater? *(CC.3.OA.2/3.OA.3)*

b. Explain in words, how you know your answer is correct?

It is correct because 3x9=27. She needs 9 buttons on each sweater.

12. A baker sells cookies in bags. The table shows different sizes of bags and how many cookies in each size of bag. *(CC.3.OA.3/3.OA.8)*

Number of Cookies in a Bag

Size of Bag	Number of Cookies
Small	15
Medium	10
Large	5

Mrs. Denney bought 2 medium bags of cookies for her family. There are 5 people in her family. How many cookies will each person get?

A) 20
B) 10
C) 4
D) 2

10 + 10 = 20 cookies

20 ÷ 5 = 4 cookies per person
cookies people

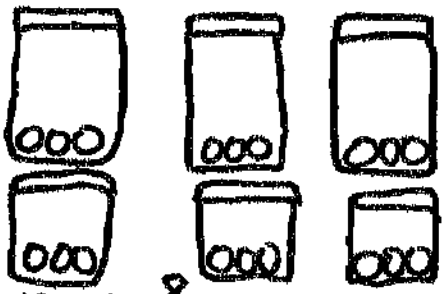
How do you know your answer is correct? Explain in words below or drawing above.

Two bags (medium) of cookies equals 20 cookies. If 5 people get an equal number of cookies, then each person would get 4 cookies.

13. Jason has 23 marbles. He gave his brother 5 marbles and divided the remaining marbles equally into 6 jars. How many marbles are in each jar? Draw to show your thinking. *(CC.3.OA.3/3.OA.8)*

23 - 5 = 18 marbles

18 ÷ 6 = 3 marbles



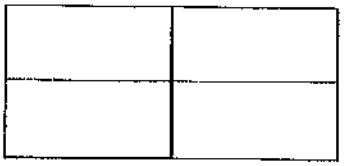
14. Find the quotient: *(CC.3.OA.7)*

a. 54 ÷ 9 = 6
b. 12 ÷ 3 = 4
c. 48 ÷ 6 = 8
d. 30 ÷ 5 = 6
e. 18 ÷ 2 = 9
f. 25 ÷ 5 = 5

15. Richard has these pattern blocks: *(CC.3.NF.1)*

What fraction of the shapes are triangles? $\frac{4}{6}$

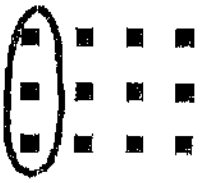
16. James folded a piece of paper into equal parts. *(CC.3.NF.1)*



What is the name for the parts?

A) eighths
B) fourths
C) thirds
D) halves

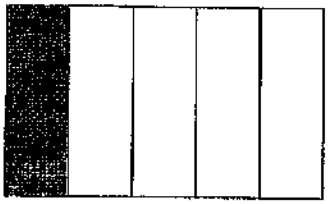
17. Candy bought 12 songs on iTunes. One fourth of the songs are country songs. *(CC.3.NF.1)*



How many of the songs are country songs?

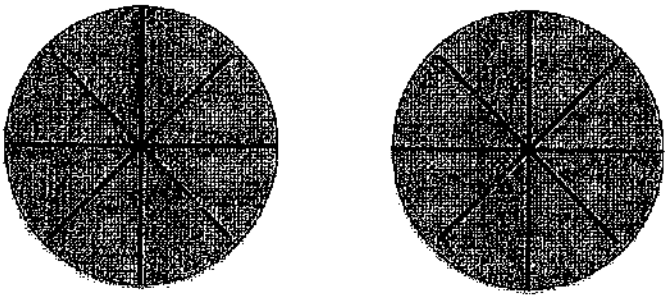
A) 12
B) 9
C) 3
D) 1

18. The shaded part of the model shows how many cars were sold at a car show. *(CC.3.NF.1)*



What fraction of the cars were sold? $\frac{1}{5}$

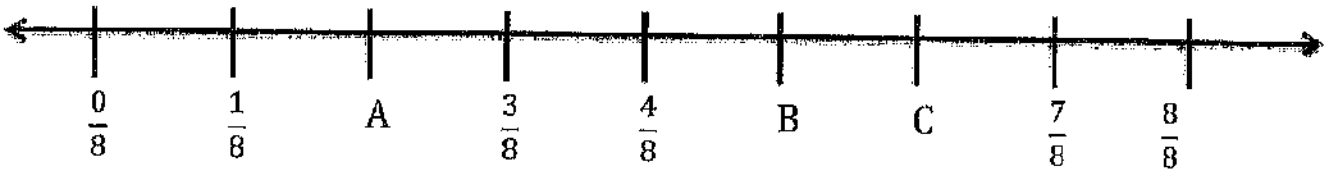
19. Abby cuts pizzas into equal parts. *(CC.3.NF.1)*



What fraction greater than 1 names both pizzas?

A) $\frac{2}{8}$ B) $\frac{6}{8}$ C) $\frac{8}{8}$ (D) $\frac{16}{8}$

20. Write the fraction that names the point. *(CC.3.NF.2ab)*



Point A $\frac{2}{8}$ Point B $\frac{5}{8}$ Point C $\frac{6}{8}$