Chapter 7

School-Home Letter

Dear Family,

During the next few weeks, our math class will be learning about division facts and strategies. We will learn strategies to use to divide by 2, 3, 4, 5, 6, 7, 8, 9, and 10. We will also learn the order of operations rules to solve problems involving more than one operation.

You can expect to see homework that provides practice with dividing by these divisors.

Here is a sample of how your child will be taught to divide.

Vocabulary

array An arrangement of objects in rows and columns

equation A number sentence that uses the equal sign to show that two amounts are equal

order of operations A special set of rules that gives the order in which calculations are done to solve a problem

related facts A set of related multiplication and division equations

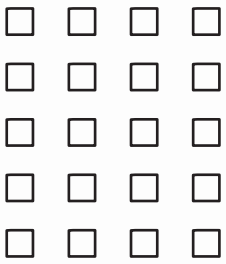
MODEL Use an Array

This is how we can use arrays to divide.

STEP 1

$20 \div 4 = \square$

Draw rows of 4 tiles until you have drawn all 20 tiles.



STEP 2

Count the number of rows to find the quotient.

There are 5 rows of 4 tiles.

So, $20 \div 4 = 5$.

Tips

Use a Related Multiplication Fact

Since division is the opposite of multiplication, using a multiplication fact is another way to find a quotient. To divide 20 by 4, for example, think of a related multiplication fact: $4 \times \square = 20$.
$4 \times 5 = 20$.
So, $20 \div 4 = 5$.

Activity

Provide 12 pennies. Have your child make as many arrays as possible using all 12 pennies. Have your child write a division equation for each array.

Capítulo 7

Carta para la casa

Vocabulario

ecuación Una oración numérica que usa el signo de igual para mostrar que dos cantidades son iguales

matriz Una forma de ordenar objetos en filas y columnas

orden de las operaciones Un conjunto especial de reglas que expresa el orden en el que se realizan las operaciones para resolver un problema

Querida familia,

Durante las próximas semanas, en la clase de matemáticas aprenderemos sobre las operaciones de división y sus estrategias. Aprenderemos estrategias para dividir entre 2, 3, 4, 5, 6, 7, 8, 9 y 10. También aprenderemos las reglas del orden de las operaciones para resolver problemas en los que hay más de una operación.

Llevaré a la casa tareas que sirven para practicar la división entre estos divisores.

Este es un ejemplo de la manera como aprenderemos a dividir.

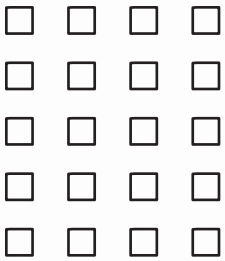
MODELO Usar una matriz

Esta es la manera como podemos usar matrices para dividir.

PASO 1

$20 \div 4 = \square$

Traza filas de 4 fichas cuadradas hasta tener las 20 fichas.



PASO 2

Cuenta la cantidad de filas para encontrar el cociente.

Hay 5 filas de 4 fichas.

Por lo tanto, $20 \div 4 = 5$.

Pistas

Usar una operación de multiplicación relacionada

Dado que la división es opuesta a la multiplicación, usar una operación de multiplicación es otra manera de hallar un cociente. Para dividir 20 entre 4, por ejemplo, piensa en una operación de multiplicación relacionada: $4 \times \square = 20$. $4 \times 5 = 20$. Por lo tanto, $20 \div 4 = 5$.

Actividad

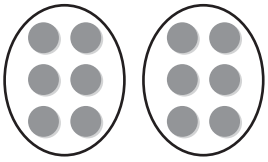
Dé a su hijo 12 monedas de 1¢. Pídale que haga la mayor cantidad posible de matrices usando las 12 monedas de 1¢. Luego, pídale que escriba un enunciado de división para cada matriz.

Name _____

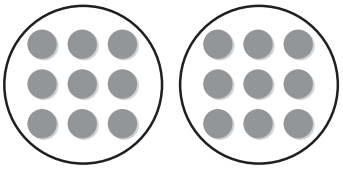
Divide by 2

COMMON CORE STANDARD MACC.3.OA.1.3
Represent and solve problems involving multiplication and division.

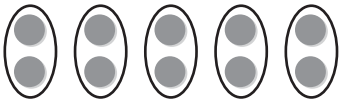
Write a division equation for the picture.

1. 

12 ÷ 2 = 6 or
12 ÷ 6 = 2

2. 

_____
_____

3. 

_____
_____

Find the quotient. You may want to draw a quick picture to help.

4. _____ = 14 ÷ 2

5. _____ = 4 ÷ 2

6. 16 ÷ 2 = _____

7. $2\overline{)18}$

8. $2\overline{)12}$

9. $2\overline{)14}$

Problem Solving REAL WORLD

10. Mr. Reynolds, the gym teacher, divided a class of 16 students into 2 equal teams. How many students were on each team?

_____

11. Sandra has 10 books. She divides them into groups of 2 each. How many groups can she make?

_____

PARCC TEST PREP

Lesson Check (MACC.3.OA.1.3)

1. Ava has 12 apples and 2 baskets. She puts an equal number of apples in each basket. How many apples are in a basket?

Ⓐ 2
Ⓑ 4
Ⓒ 6
Ⓓ 8

2. There are 8 students singing a song in the school musical. Ms. Lang put the students in 2 equal rows. How many students are in each row?

Ⓐ 2
Ⓑ 4
Ⓒ 6
Ⓓ 10

Spiral Review (MACC.3.OA.1.2, MACC.3.OA.1.3, MACC.3.OA.4.9)

3. Find the product. (Lesson 4.1)

2×6

Ⓐ 4
Ⓑ 8
Ⓒ 12
Ⓓ 18

4. Jayden plants 24 trees. He plants the trees equally in 3 rows. How many trees are in each row? (Lesson 6.2)

Ⓐ 6
Ⓑ 8
Ⓒ 9
Ⓓ 27

5. Which of the following describes this pattern? (Lesson 4.7)

9, 12, 15, 18, 21, 24

Ⓐ Multiply by 3.
Ⓑ Multiply by 5.
Ⓒ Add 3.
Ⓓ Subtract 3.

6. A tricycle has 3 wheels. How many wheels are there on 4 tricycles? (Lesson 4.3)

Ⓐ 7
Ⓑ 9
Ⓒ 12
Ⓓ 15

Name _____

Divide by 10

COMMON CORE STANDARD MACC.3.OA.3.7
Multiply and divide within 100.

Find the unknown factor and quotient.

1. $10 \times \underline{2} = 20$ $\quad 20 \div 10 = \underline{2}$

2. $10 \times \_\_\_\_ = 70$ $\quad 70 \div 10 = \_\_\_\_$

3. $10 \times \_\_\_\_ = 80$ $\quad 80 \div 10 = \_\_\_\_$

4. $10 \times \_\_\_\_ = 30$ $\quad 30 \div 10 = \_\_\_\_$

Find the quotient.

5. $60 \div 10 = \_\_\_\_$

6. $\_\_\_\_ = 40 \div 4$

7. $20 \div 2 = \_\_\_\_$

8. $50 \div 10 = \_\_\_\_$

9. $90 \div 10 = \_\_\_\_$

10. $10 \div 10 = \_\_\_\_$

11. $\_\_\_\_ = 30 \div 10$

12. $40 \div 10 = \_\_\_\_$

13. $10\overline{)40}$

14. $10\overline{)70}$

15. $10\overline{)100}$

16. $10\overline{)20}$

Problem Solving REAL WORLD

17. Pencils cost $10¢$ each. How many pencils can Brent buy with $90¢$?

_____

18. Mrs. Marks wants to buy 80 pens. If the pens come in packs of 10, how many packs does she need to buy?

_____

PARCC TEST PREP

Lesson Check (MACC.3.OA.3.7)

1. Gracie uses 10 beads on each necklace she makes. She has 60 beads to use. How many necklaces can Gracie make?

Ⓐ 6
Ⓑ 10
Ⓒ 50
Ⓓ 70

2. A florist arranges 10 flowers in each vase. How many vases does the florist need to arrange 40 flowers?

Ⓐ 3
Ⓑ 4
Ⓒ 30
Ⓓ 50

Spiral Review (MACC.3.OA.1.2, MACC.3.OA.1.3, MACC.3.OA.1.4, MACC.3.NBT.1.3)

3. What is the unknown factor? (Lesson 5.2)

$7 \times p = 14$

Ⓐ 21
Ⓑ 7
Ⓒ 3
Ⓓ 2

4. Aspen Bakery sold 40 boxes of rolls in one day. Each box holds 6 rolls. How many rolls in all did the bakery sell? (Lesson 5.4)

Ⓐ 24
Ⓑ 46
Ⓒ 240
Ⓓ 320

5. Mr. Samuels buys a sheet of stamps. There are 4 rows with 7 stamps in each row. How many stamps does Mr. Samuels buy? (Lesson 4.1)

Ⓐ 11
Ⓑ 14
Ⓒ 21
Ⓓ 28

6. There are 56 students going on a field trip to the science center. The students tour the center in groups of 8. How many groups of students are there? (Lesson 6.2)

Ⓐ 6
Ⓑ 7
Ⓒ 9
Ⓓ 64

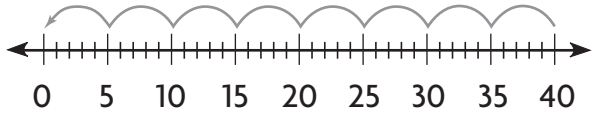
Name _____

Divide by 5

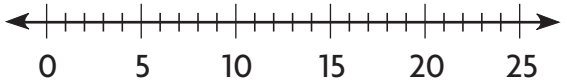
COMMON CORE STANDARD MACC.3.OA.1.3
Represent and solve problems involving multiplication and division.

Use count up or count back on a number line to solve.

1. $40 \div 5 =$ 8



2. $25 \div 5 =$ ____



Find the quotient.

3. ____ $= 10 \div 5$	**4.** ____ $= 30 \div 5$	**5.** $14 \div 2 =$ ____	**6.** $5 \div 5 =$ ____
7. $45 \div 5 =$ ____	**8.** ____ $= 60 \div 10$	**9.** ____ $= 15 \div 5$	**10.** $18 \div 2 =$ ____
11. ____ $= 0 \div 5$	**12.** $20 \div 5 =$ ____	**13.** $25 \div 5 =$ ____	**14.** ____ $= 35 \div 5$
15. $5\overline{)20}$	**16.** $10\overline{)70}$	**17.** $5\overline{)15}$	**18.** $5\overline{)40}$

Problem Solving REAL WORLD

19. A model car maker puts 5 wheels in each kit. A machine makes 30 wheels at a time. How many packages of 5 wheels can be made from the 30 wheels?

_____

20. A doll maker puts a small bag with 5 hair ribbons inside each box with a doll. How many bags of 5 hair ribbons can be made from 45 hair ribbons?

_____

PARCC TEST PREP

Lesson Check (MACC.3.OA.1.3)

1. A model train company puts 5 boxcars with each train set. How many sets can be completed using 35 boxcars?

Ⓐ 5
Ⓑ 6
Ⓒ 7
Ⓓ 8

2. A machine makes 5 buttons at a time. Each doll shirt gets 5 buttons. How many doll shirts can be finished with 5 buttons?

Ⓐ 0
Ⓑ 1
Ⓒ 2
Ⓓ 5

Spiral Review (MACC.3.OA.1.3, MACC.3.MD.2.4)

3. Julia earns $5 each day running errands for a neighbor. How much will Julia earn if she runs errands for 6 days in one month? (Lesson 4.3)

Ⓐ $40
Ⓑ $35
Ⓒ $30
Ⓓ $25

4. Marcus has 12 slices of bread. He uses 2 slices of bread for each sandwich. How many sandwiches can Marcus make? (Lesson 7.1)

Ⓐ 6
Ⓑ 7
Ⓒ 8
Ⓓ 9

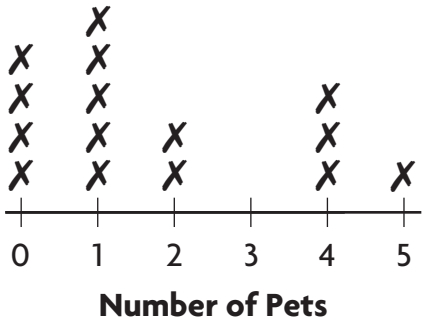
Use the line plot for 5–6.

5. How many students have no pets? (Lesson 2.7)

Ⓐ 0 Ⓒ 4
Ⓑ 3 Ⓓ 5

6. How many students answered the question "How many pets do you have?" (Lesson 2.7)

Ⓐ 10 Ⓒ 14
Ⓑ 12 Ⓓ 15



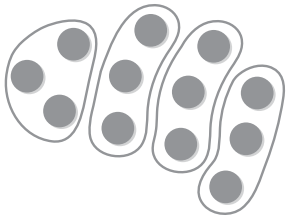
Name _____

Divide by 3

COMMON CORE STANDARD MACC.3.OA.3.7
Multiply and divide within 100.

Find the quotient. Draw a quick picture to help.

1. $12 \div 3 =$ 4



2. $24 \div 3 =$ ___

3. ___ $= 6 \div 3$

4. $40 \div 5 =$ ___

Find the quotient.

5. ___ $= 15 \div 3$

6. ___ $= 21 \div 3$

7. $16 \div 2 =$ ___

8. $27 \div 3 =$ ___

9. $0 \div 3 =$ ___

10. $9 \div 3 =$ ___

11. ___ $= 30 \div 3$

12. ___ $= 12 \div 4$

13. $3\overline{)12}$

14. $3\overline{)15}$

15. $3\overline{)24}$

16. $3\overline{)9}$

Problem Solving REAL WORLD

17. The principal at Miller Street School has 12 packs of new pencils. She will give 3 packs to each third-grade class. How many third-grade classes are there?

_____

18. Mike has $\$21$ to spend at the mall. He spends all of his money on bracelets for his sisters. Bracelets cost $\$3$ each. How many bracelets does he buy?

_____

PARCC TEST PREP

Lesson Check (MACC.3.OA.3.7)

1. There are 18 counters divided equally among 3 groups. How many counters are in each group?

Ⓐ 5
Ⓑ 6
Ⓒ 7
Ⓓ 8

2. Josh has 27 signed baseballs. He places the baseballs equally on 3 shelves. How many baseballs are on each shelf?

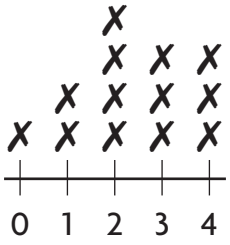
Ⓐ 6
Ⓑ 7
Ⓒ 8
Ⓓ 9

Spiral Review (MACC.3.OA.1.1, MACC.3.OA.2.5, MACC.3.OA.2.6, MACC.3.MD.2.4)

3. Each bicycle has 2 wheels. How many wheels do 8 bicycles have? (Lesson 3.1)

Ⓐ 10
Ⓑ 16
Ⓒ 24
Ⓓ 32

4. How many students watch less than 3 hours of TV a day? (Lesson 2.7)



Hours Watching TV

Ⓐ 3
Ⓑ 7
Ⓒ 8
Ⓓ 13

5. Which of the following is an example of the Distributive Property? (Lesson 4.4)

Ⓐ $3 \times 6 = 18$
Ⓑ $6 \times 3 = 15 + 3$
Ⓒ $3 \times 6 = 6 \times 3$
Ⓓ $3 \times 6 = (3 \times 2) + (3 \times 4)$

6. Which unknown number completes the equations? (Lesson 6.7)

$3 \times \blacksquare = 21$ $\quad 21 \div 3 = \blacksquare$

Ⓐ 3
Ⓑ 6
Ⓒ 7
Ⓓ 18

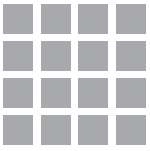
Name _____

Divide by 4

COMMON CORE STANDARD MACC.3.OA.3.7
Multiply and divide within 100.

Draw tiles to make an array. Find the quotient.

1. $\underline{4} = 16 \div 4$



2. $20 \div 4 = \_\_\_\_$

3. $12 \div 4 = \_\_\_\_$

4. $10 \div 2 = \_\_\_\_$

Find the quotient.

5. $24 \div 3 = \_\_\_\_$

6. $\_\_\_\_ = 8 \div 2$

7. $32 \div 4 = \_\_\_\_$

8. $\_\_\_\_ = 28 \div 4$

9. $4\overline{)36}$

10. $4\overline{)8}$

11. $4\overline{)24}$

12. $3\overline{)30}$

Find the unknown number.

13. $20 \div 5 = a$

$a = \_\_\_\_$

14. $32 \div 4 = p$

$p = \_\_\_\_$

15. $40 \div 10 = \square$

$\square = \_\_\_\_$

16. $18 \div 3 = x$

$x = \_\_\_\_$

Problem Solving REAL WORLD

17. Ms. Higgins has 28 students in her gym class. She puts them in 4 equal groups. How many students are in each group?

_____

18. Andy has 36 CDs. He buys a case that holds 4 CDs in each section. How many sections can he fill?

_____

PARCC TEST PREP

Lesson Check (MACC.3.OA.3.7)

1. Darion picks 16 grapefruits off a tree in his backyard. He puts 4 grapefruits in each bag. How many bags does he need?

Ⓐ 3
Ⓑ 4
Ⓒ 5
Ⓓ 6

2. Tori has a bag of 32 markers to share equally among 3 friends and herself. How many markers will Tori and each of her friends get?

Ⓐ 6
Ⓑ 7
Ⓒ 8
Ⓓ 9

Spiral Review (MACC.3.OA.1.2, MACC.3.OA.2.5, MACC.3.OA.3.7, MACC.3.OA.4.9)

3. Find the product. (Lesson 4.5)

3×7

Ⓐ 18
Ⓑ 21
Ⓒ 24
Ⓓ 28

4. Which of the following describes this pattern? (Lesson 4.7)

8, 12, 16, 20, 24, 28

Ⓐ Multiply by 4.
Ⓑ Add 4.
Ⓒ Multiply by 2.
Ⓓ Subtract 4.

5. Which is an example of the Commutative Property of Multiplication? (Lesson 3.6)

Ⓐ $3 \times 6 = 2 \times 9$
Ⓑ $2 \times 4 = 5 + 3$
Ⓒ $4 \times 5 = 5 \times 4$
Ⓓ $2 \times 5 = 5 + 5$

6. Jasmine has 18 model horses. She places the model horses equally on 3 shelves. How many model horses are on each shelf? (Lesson 6.2)

Ⓐ 6
Ⓑ 7
Ⓒ 15
Ⓓ 21

Name _____

Divide by 6

COMMON CORE STANDARD MACC.3.OA.3.7
Multiply and divide within 100.

Find the unknown factor and quotient.

1. $6 \times \underline{7} = 42$ $42 \div 6 = \underline{7}$

2. $6 \times \_\_\_\_ = 18$ $18 \div 6 = \_\_\_\_$

3. $4 \times \_\_\_\_ = 24$ $24 \div 4 = \_\_\_\_$

4. $6 \times \_\_\_\_ = 54$ $54 \div 6 = \_\_\_\_$

Find the quotient.

5. $\_\_\_\_ = 24 \div 6$

6. $48 \div 6 = \_\_\_\_$

7. $\_\_\_\_ = 6 \div 6$

8. $12 \div 6 = \_\_\_\_$

9. $6\overline{)36}$

10. $6\overline{)54}$

11. $6\overline{)30}$

12. $1\overline{)6}$

Find the unknown number.

13. $p = 42 \div 6$

$p = \_\_\_\_$

14. $18 \div 3 = q$

$q = \_\_\_\_$

15. $r = 30 \div 6$

$r = \_\_\_\_$

16. $60 \div 6 = s$

$s = \_\_\_\_$

Problem Solving REAL WORLD

17. Lucas has 36 pages of a book left to read. If he reads 6 pages a day, how many days will it take Lucas to finish the book?

_____

18. Juan has $24 to spend at the bookstore. If books cost $6 each, how many books can he buy?

_____

PARCC TEST PREP

Lesson Check (MACC.3.OA.3.7)

1. Ella earned $54 last week babysitting. She earns $6 an hour. How many hours did Ella babysit last week?

Ⓐ 6 hours

Ⓑ 7 hours

Ⓒ 8 hours

Ⓓ 9 hours

2. What is the unknown factor and quotient?

$6 \times \square = 42$ $\quad 42 \div 6 = \square$

Ⓐ 6

Ⓑ 7

Ⓒ 8

Ⓓ 9

Spiral Review (MACC.3.OA.1.1, MACC.3.OA.1.2, MACC.3.OA.3.7, MACC.3.OA.4.8)

3. Coach Clarke has 48 students in his P.E. class. He places the students in teams of 6 for an activity. How many teams can Coach Clarke make? (Lesson 6.3)

Ⓐ 7

Ⓑ 8

Ⓒ 9

Ⓓ 54

4. Each month for 7 months, Eva reads 3 books. How many more books does she need to read before she has read 30 books? (Lesson 4.10)

Ⓐ 7

Ⓑ 9

Ⓒ 27

Ⓓ 33

5. Each cow has 4 legs. How many legs will 5 cows have? (Lesson 3.1)

Ⓐ 9

Ⓑ 16

Ⓒ 20

Ⓓ 24

6. Find the product. (Lesson 4.9)

3×9

Ⓐ 36

Ⓑ 27

Ⓒ 18

Ⓓ 12

Name _____

Divide by 7

COMMON CORE STANDARD MACC.3.OA.3.7
Multiply and divide within 100.

Find the unknown factor and quotient.

1. $7 \times \underline{6} = 42$ $42 \div 7 = \underline{6}$

2. $7 \times \_\_\_\_ = 35$ $35 \div 7 = \_\_\_\_$

3. $7 \times \_\_\_\_ = 7$ $7 \div 7 = \_\_\_\_$

4. $5 \times \_\_\_\_ = 20$ $20 \div 5 = \_\_\_\_$

Find the quotient.

5. $7\overline{)21}$

6. $7\overline{)14}$

7. $6\overline{)48}$

8. $7\overline{)63}$

9. $\_\_\_\_ = 35 \div 7$

10. $0 \div 7 = \_\_\_\_$

11. $\_\_\_\_ = 56 \div 7$

12. $32 \div 8 = \_\_\_\_$

Find the unknown number.

13. $56 \div 7 = e$
$e = \_\_\_\_$

14. $k = 32 \div 4$
$k = \_\_\_\_$

15. $g = 49 \div 7$
$g = \_\_\_\_$

16. $28 \div 7 = s$
$s = \_\_\_\_$

Problem Solving REAL WORLD

17. Twenty-eight players sign up for basketball. The coach puts 7 players on each team. How many teams are there?

_____

18. Roberto read 42 books over 7 months. He read the same number of books each month. How many books did Roberto read each month?

_____

PARCC TEST PREP

Lesson Check (MACC.3.OA.3.7)

1. Elliot earned $\$49$ last month walking his neighbor's dog. He earns $\$7$ each time he walks the dog. How many times did Elliot walk his neighbor's dog last month?

Ⓐ 6 Ⓒ 8

Ⓑ 7 Ⓓ 9

2. Which is the unknown factor and quotient?

$7 \times \blacksquare = 63$

$63 \div 7 = \blacksquare$

Ⓐ 6 Ⓒ 8

Ⓑ 7 Ⓓ 9

Spiral Review (MACC.3.OA.1.3, MACC.3.OA.2.5, MACC.3.OA.2.6, MACC.3.OA.3.7)

3. Maria puts 6 strawberries in each smoothie she makes. She makes 3 smoothies. Altogether, how many strawberries does Maria use in the smoothies? (Lesson 4.3)

Ⓐ 9

Ⓑ 12

Ⓒ 18

Ⓓ 24

4. Kaitlyn makes 4 bracelets. She uses 8 beads for each bracelet. How many beads does she use in all? (Lesson 4.8)

Ⓐ 12

Ⓑ 16

Ⓒ 32

Ⓓ 40

5. What is the unknown factor? (Lesson 3.6)

$2 \times 5 = 5 \times \blacksquare$

Ⓐ 10

Ⓑ 5

Ⓒ 2

Ⓓ 1

6. Which division equation is related to the following multiplication equation? (Lesson 6.7)

$3 \times 4 = 12$

Ⓐ $12 \div 4 = 3$

Ⓑ $8 \div 2 = 4$

Ⓒ $12 \div 2 = 6$

Ⓓ $10 \div 5 = 2$

Name _____

Divide by 8

COMMON CORE STANDARD MACC.3.OA.1.4
Represent and solve problems involving multiplication and division.

Find the unknown factor and quotient.

1. $8 \times \underline{4} = 32$ $32 \div 8 = \_\_\_\_$

2. $3 \times \_\_\_\_ = 27$ $27 \div 3 = \_\_\_\_$

3. $8 \times \_\_\_\_ = 8$ $8 \div 8 = \_\_\_\_$

4. $8 \times \_\_\_\_ = 72$ $72 \div 8 = \_\_\_\_$

Find the quotient.

5. $\_\_\_\_ = 24 \div 8$

6. $40 \div 8 = \_\_\_\_$

7. $\_\_\_\_ = 56 \div 8$

8. $14 \div 2 = \_\_\_\_$

9. $8\overline{)64}$

10. $7\overline{)28}$

11. $8\overline{)16}$

12. $8\overline{)48}$

Find the unknown number.

13. $16 \div p = 8$

$p = \_\_\_\_$

14. $25 \div \blacksquare = 5$

$\blacksquare = \_\_\_\_$

15. $24 \div a = 3$

$a = \_\_\_\_$

16. $k \div 10 = 8$

$k = \_\_\_\_$

Problem Solving REAL WORLD

17. Sixty-four students are going on a field trip. There is 1 adult for every 8 students. How many adults are there?

_____

18. Mr. Chen spends $32 for tickets to a play. If the tickets cost $8 each, how many tickets does Mr. Chen buy?

_____

PARCC TEST PREP

Lesson Check (MACC.3.OA.1.4)

1. Mrs. Wilke spends $72 on pies for the school fair. Each pie costs $8. How many pies does Mrs. Wilke buy for the school fair?

Ⓐ 6
Ⓑ 7
Ⓒ 8
Ⓓ 9

2. Find the unknown factor and quotient.

$8 \times \square = 40$

$40 \div 8 = \square$

Ⓐ 4
Ⓑ 5
Ⓒ 6
Ⓓ 7

Spiral Review (MACC.3.OA.1.3, MACC.3.OA.1.4, MACC.3.OA.2.5)

3. Find the product. (Lesson 4.6)

$(3 \times 2) \times 5$

Ⓐ 6
Ⓑ 10
Ⓒ 20
Ⓓ 30

4. Which of the following has the same product as 4×9? (Lesson 3.6)

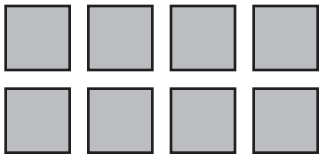
Ⓐ 3×8
Ⓑ 9×4
Ⓒ 5×6
Ⓓ 7×2

5. Find the unknown factor. (Lesson 5.2)

$8 \times \square = 32$

Ⓐ 4
Ⓑ 5
Ⓒ 6
Ⓓ 24

6. Which multiplication sentence represents the array? (Lesson 3.5)



Ⓐ $1 \times 8 = 8$
Ⓑ $4 + 4 = 8$
Ⓒ $2 \times 4 = 8$
Ⓓ $4 \times 3 = 12$

Name _____

Divide by 9

COMMON CORE STANDARD MACC.3.OA.3.7
Multiply and divide within 100.

Find the quotient.

1. 4 = 36 ÷ 9 **2.** 30 ÷ 6 = _____ **3.** _____ = 81 ÷ 9 **4.** 27 ÷ 9 = _____

5. 9 ÷ 9 = _____ **6.** _____ = 63 ÷ 7 **7.** 36 ÷ 6 = _____ **8.** _____ = 90 ÷ 9

9. $9\overline{)63}$ **10.** $9\overline{)18}$ **11.** $7\overline{)49}$ **12.** $9\overline{)45}$

Find the unknown number.

13. 48 ÷ 8 = *g* **14.** *s* = 72 ÷ 9 **15.** *m* = 0 ÷ 9 **16.** 54 ÷ 9 = *n*

g = _____ *s* = _____ *m* = _____ *n* = _____

Problem Solving REAL WORLD

17. A crate of oranges has trays inside that hold 9 oranges each. There are 72 oranges in the crate. If all trays are filled, how many trays are there?

_____

18. Van has 45 new baseball cards. He puts them in a binder that holds 9 cards on each page. How many pages does he fill?

_____

PARCC TEST PREP

Lesson Check (MACC.3.OA.3.7)

1. Darci sets up a room for a banquet. She has 54 chairs. She places 9 chairs at each table. How many tables have 9 chairs?

Ⓐ 5
Ⓑ 6
Ⓒ 7
Ⓓ 8

2. Mr. Robinson sets 36 glasses on a table. He puts the same number of glasses in each of 9 rows. How many glasses does he put in each row?

Ⓐ 4
Ⓑ 5
Ⓒ 6
Ⓓ 7

Spiral Review (MACC.3.OA.3.7, MACC.3.OA.4.8, MACC.3.NBT.1.3)

3. Each month for 9 months, Jordan buys 2 sports books. How many more sports books does he need to buy before he has bought 25 sports books? (Lesson 4.10)

Ⓐ 6
Ⓑ 7
Ⓒ 8
Ⓓ 9

4. Find the product. (Lesson 4.8)

$$\begin{array}{r} 8 \\ \times\ 7 \\ \hline \end{array}$$

Ⓐ 49
Ⓑ 56
Ⓒ 63
Ⓓ 64

5. Adriana made 30 pet collars to bring to the pet fair. She wants to display 3 pet collars on each hook. How many hooks will Adriana need to display all 30 pet collars? (Lesson 6.3)

Ⓐ 32
Ⓑ 12
Ⓒ 10
Ⓓ 9

6. Carla packs 4 boxes of books. Each box has 9 books. How many books does Carla pack? (Lesson 4.9)

Ⓐ 36
Ⓑ 27
Ⓒ 13
Ⓓ 5

Name _____

Problem Solving • Two-Step Problems

COMMON CORE STANDARD MACC.3.OA.4.8
Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Solve the problem.

1. Jack has 3 boxes of pencils with the same number of pencils in each box. His mother gives him 4 more pencils. Now Jack has 28 pencils. How many pencils are in each box?

Think: I can start with 28 counters and act out the problem.

8 pencils

2. The art teacher has 48 paintbrushes. She puts 8 paintbrushes on each table in her classroom. How many tables are in her classroom?

_____

3. Ricardo has 2 cases of video games with the same number of games in each case. He gives 4 games to his brother. Ricardo has 10 games left. How many video games were in each case?

_____

4. Patty has $20 to spend on gifts for her friends. Her mother gives her $5 more. If each gift costs $5, how many gifts can she buy?

_____

5. Joe has a collection of 35 DVD movies. He received 8 of them as gifts. Joe bought the rest of his movies over 3 years. If he bought the same number of movies each year, how many movies did Joe buy last year?

_____

6. Liz has a 24-inch-long ribbon. She cuts nine 2-inch pieces from her original ribbon. How much of the original ribbon is left?

_____

PARCC TEST PREP

Lesson Check (MACC.3.OA.4.8)

1. Gavin saved $16 to buy packs of baseball cards. His father gives him $4 more. If each pack of cards costs $5, how many packs can Gavin buy?

Ⓐ 3
Ⓑ 4
Ⓒ 5
Ⓓ 6

2. Chelsea buys 8 packs of markers. Each pack contains the same number of markers. Chelsea gives 10 markers to her brother. Then, she has 54 markers left. How many markers were in each pack?

Ⓐ 6
Ⓑ 7
Ⓒ 8
Ⓓ 9

Spiral Review (MACC.3.OA.1.1, MACC.3.OA.1.3, MACC.3.OA.1.4, MACC.3.OA.4.8)

3. Each foot has 5 toes. How many toes will 6 feet have? (Lesson 3.1)

Ⓐ 11
Ⓑ 25
Ⓒ 30
Ⓓ 35

4. Each month for 5 months, Sophie makes 2 quilts. How many more quilts does she need to make before she has made 16 quilts? (Lesson 4.10)

Ⓐ 3
Ⓑ 6
Ⓒ 7
Ⓓ 8

5. Meredith practices the piano for 3 hours each week. How many hours will she practice in 8 weeks? (Lesson 4.3)

Ⓐ 18 hours
Ⓑ 21 hours
Ⓒ 24 hours
Ⓓ 27 hours

6. Find the unknown factor. (Lesson 5.2)

$9 \times \square = 36$

Ⓐ 3
Ⓑ 4
Ⓒ 6
Ⓓ 8

Name _____

Order of Operations

COMMON CORE STANDARD MACC.3.OA.4.8
Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Write *correct* if the operations are listed in the correct order. If not correct, write the correct order of operations.

1. $45 - 3 \times 5$ subtract, multiply

multiply, subtract

2. $3 \times 4 \div 2$ divide, multiply

_____

3. $5 + 12 \div 2$ divide, add

_____

4. $7 \times 10 + 3$ add, multiply

_____

Follow the order of operations to find the unknown number.

5. $6 + 4 \times 3 = n$

$n =$ _____

6. $8 - 3 + 2 = k$

$k =$ _____

7. $24 \div 3 + 5 = p$

$p =$ _____

8. $12 - 2 \times 5 = r$

$r =$ _____

9. $7 \times 8 - 6 = j$

$j =$ _____

10. $4 + 3 \times 9 = w$

$w =$ _____

Problem Solving REAL WORLD

11. Shelley bought 3 kites for $6 each. She gave the clerk $20. How much change should Shelley get?

_____

12. Tim has 5 apples and 3 bags with 8 apples in each bag. How many apples does Tim have in all?

_____

PARCC TEST PREP

Lesson Check (MACC.3.OA.4.8)

1. Natalie is making doll costumes. Each costume has 4 buttons that cost 3¢ each and a zipper that costs 7¢. How much does she spend on buttons and a zipper for each costume?

Ⓐ 19¢
Ⓑ 33¢
Ⓒ 40¢
Ⓓ 49¢

2. Leonardo's mother gave him 5 bags with 6 flower bulbs in each bag to plant. He has planted all except 3 bulbs. How many flower bulbs has Leonardo planted?

Ⓐ 12
Ⓑ 15
Ⓒ 27
Ⓓ 33

Spiral Review (MACC.3.OA.3.7, MACC.3.OA.4.9, MACC.3.NBT.1.3)

3. Each story in Will's apartment building is 9 feet tall. There are 10 stories in the building. How tall is the apartment building? (Lesson 5.5)

Ⓐ 90 feet
Ⓑ 80 feet
Ⓒ 19 feet
Ⓓ 9 feet

4. Which of the following describes a pattern in the table? (Lesson 5.1)

Tables	1	2	3	4
Chairs	4	8	12	16

Ⓐ Add 3.
Ⓑ Multiply by 2.
Ⓒ Subtract 3.
Ⓓ Multiply by 4.

5. For decorations, Meg cut out 8 groups of 7 snowflakes each. How many snowflakes did Meg cut out in all? (Lesson 4.5)

Ⓐ 72
Ⓑ 63
Ⓒ 58
Ⓓ 56

6. A small van can hold 6 students. How many small vans are needed to take 36 students on a field trip to the music museum? (Lesson 7.6)

Ⓐ 4
Ⓑ 6
Ⓒ 7
Ⓓ 8

Name _____

COMMON CORE STANDARDS MACC.3.OA.1.3, MACC.3.OA.1.4, MACC.3.OA.3.7, MACC.3.OA.4.8

Chapter 7 Extra Practice

Lessons 7.1 - 7.2

Find the quotient. You may want to draw a quick picture to help.

1. $8 \div 2 =$ _____ **2.** _____ $= 14 \div 2$ **3.** $18 \div 2 =$ _____ **4.** _____ $= 12 \div 2$

5. $70 \div 10 =$ ____ **6.** $50 \div 10 =$ ____ **7.** $40 \div 10 =$ ____ **8.** $90 \div 10 =$ ____

Lessons 7.3 - 7.4

Find the quotient.

1. $15 \div 5 =$ ____ **2.** ____ $= 45 \div 5$ **3.** ____ $= 10 \div 5$ **4.** $40 \div 5 =$ ____

5. $6 \div 3 =$ _____ **6.** ____ $= 21 \div 3$ **7.** ____ $= 24 \div 3$ **8.** ____ $= 18 \div 3$

9. There are 30 balloons arranged in 6 equal groups. How many balloons are in each group?

_____

10. Mr. Song spends $27 on sports drinks. Each bottle costs $3. How many bottles does Mr. Song buy?

_____

Lesson 7.5

Find the quotient.

1. $28 \div 4 =$ ____ **2.** ____ $= 16 \div 4$ **3.** ____ $= 20 \div 4$ **4.** ____ $= 32 \div 4$

5. $4\overline{)36}$ **6.** $4\overline{)12}$ **7.** $4\overline{)24}$ **8.** $4\overline{)4}$

Find the unknown number.

9. $a = 40 \div 4$ **10.** $0 \div 4 = b$ **11.** $c = 36 \div 4$ **12.** $8 \div 4 = d$

$a =$ ____ $b =$ ____ $c =$ ____ $d =$ ____

Lessons 7.6 - 7.7

Find the unknown factor and quotient.

1. $7 \times \_\_\_\_ = 35$ $35 \div 7 = \_\_\_\_$

2. $6 \times \_\_\_\_ = 54$ $54 \div 6 = \_\_\_\_$

3. $6 \times \_\_\_\_ = 18$ $18 \div 6 = \_\_\_\_$

4. $7 \times \_\_\_\_ = 49$ $49 \div 7 = \_\_\_\_$

Find the quotient.

5. $36 \div 6 = \_\_\_\_$

6. $48 \div 6 = \_\_\_\_$

7. $7\overline{)63}$

8. $7\overline{)56}$

Lessons 7.8 - 7.9

Find the quotient.

1. $40 \div 8 = \_\_\_\_$

2. $\_\_\_\_ = 24 \div 8$

3. $72 \div 9 = \_\_\_\_$

4. $\_\_\_\_ = 81 \div 9$

Find the unknown number.

5. $36 \div 9 = m$

$m = \_\_\_\_$

6. $18 \div 9 = \square$

$\square = \_\_\_\_$

7. $48 \div 8 = b$

$b = \_\_\_\_$

8. $56 \div 8 = p$

$p = \_\_\_\_$

Lesson 7.10

1. At a store, there are 5 vases. Each vase has the same number of flowers. Sixteen flowers are sold. Now there are 24 flowers left. How many flowers were in each vase?

_____

2. Lizzy bought 4 bags of apples. Each bag had the same number of apples. Her mom gave her 8 more apples. Now Lizzy has 36 apples. How many apples were in each bag?

_____

Lesson 7.11

Follow the order of operations to find the unknown number.

1. $10 - 3 + 4 = t$

$t = \_\_\_\_$

2. $8 - 3 \times 2 = p$

$p = \_\_\_\_$

3. $24 \div 6 + 2 = w$

$w = \_\_\_\_$