



Name _____

10.1

Model Division

Division Packet - 1.
complete & return for a \$50 deposit.
make sure to show work on each problem.

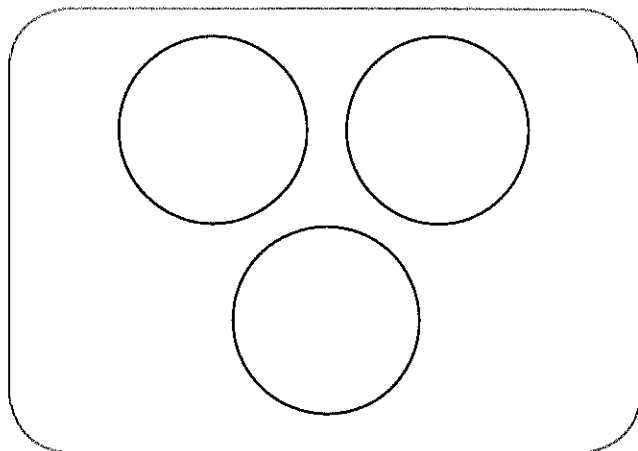
Draw to solve the problem.

1. Greg has 15 marbles. He puts them in 3 equal groups. How many marbles are in each group?

There are _____ marbles.

There are _____ groups.

So, there are _____ in each group.

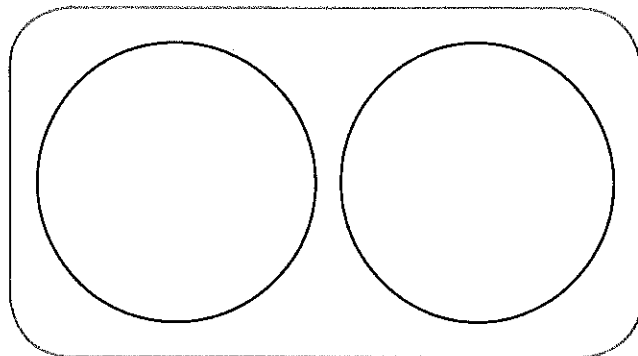


2. Yuri has 12 counters. He puts them in 2 equal groups. How many counters are in each group?

There are _____ counters.

There are _____ groups.

So, there are _____ in each group.



Problem Solving



3. A farmer puts an equal number of fruit in each of 6 baskets. If there are 18 pears and 24 peaches, how many pieces of fruit are in each basket?
4. The same farmer has 16 pumpkins. How many different ways can the pumpkins be put into equal groups?

Fill in the bubble completely to show your answer.

5. Gordy makes 24 muffins. Each tray has 6 muffins. How many trays does Gordy have?
- (A) 18
(B) 6
(C) 4
(D) 8
7. Hunan works at the school breakfast party. He makes 30 pancakes. If he puts 5 pancakes on each plate, how many plates will he need?
- (A) 4
(B) 6
(C) 8
(D) 25
9. **Multi-Step** Jason has 15 red beads and 10 blue beads. He makes 5 bracelets with an equal number of beads. How many beads are on each bracelet?
- (A) 3
(B) 2
(C) 5
(D) 4
6. Sonja has 28 photos in an album. Each page has 4 photos. How many pages have photos?
- (A) 9
(B) 24
(C) 8
(D) 7
8. Cara works in a cycle shop. She has 18 wheels for tricycles. If each tricycle needs 3 wheels, how many tricycles can she put together?
- (A) 21
(B) 5
(C) 15
(D) 6
10. **Multi-Step** Shana has 23 comic books and 19 coloring books. She puts them into 6 equal stacks. How many books are in each stack?
- (A) 7
(B) 8
(C) 42
(D) 6



Name _____

10.2 Number of Equal Groups

Draw equal groups to solve. Complete the sentences.

1. A classroom has 21 desks in rows of 3 desks each. How many rows are there?

The classroom has _____ desks.

There are _____ in each row.

So, there are _____ rows.

2. The lunchroom has 28 plates in 7 equal stacks. How many plates are in each stack?

The lunchroom has _____ plates.

There are _____ equal stacks.

So, there are _____ plates in each stack.

Problem Solving

3. There are 35 students in gym class. There are 7 students on each team. How many teams are there?

4. On a class trip there are 24 students in mini vans. There are 8 students in each van. How many vans are there?

Fill in the bubble completely to show your answer.

5. Lisa has 40 beads to make a necklace. She puts the beads in 8 equal groups. How many beads are in each group?
- (A) 32
(B) 8
(C) 48
(D) 5
6. A store clerk has 18 video games. She puts them in 3 equal groups on some shelves. How many video games are on each shelf?
- (A) 15
(B) 6
(C) 21
(D) 5
7. A grocer has 32 bunches of bananas. He puts them in baskets of 8 each. How many baskets does the grocer use?
- (A) 40
(B) 24
(C) 6
(D) 4
8. Jake's workout includes 25 push-ups. He does them in sets of 5 each. How many sets of push-ups does Jake's workout include?
- (A) 5
(B) 4
(C) 20
(D) 6
9. **Multi-Step** Holly has 24 roses and 24 tulips. She wants to put 8 flowers each into a vase. How many vases will Holly need for all of the flowers?
- (A) 48
(B) 3
(C) 6
(D) 40
10. **Multi-Step** Roscoe makes a tile design with 18 red tiles and 27 blue tiles. He arranges them in 9 rows. How many tiles are in each row?
- (A) 3
(B) 5
(C) 2
(D) 9



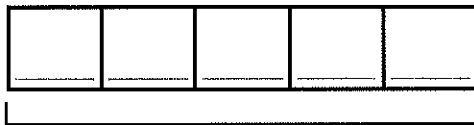
Name _____

10.3 Division Models

ALGEBRA

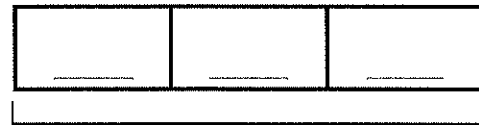
Complete the strip diagram to solve. Then write a division equation for the strip diagram.

1. Alice has 25 dimes in 5 equal stacks. How many dimes are in each stack?



25 dimes

2. Toby has 12 action figures in sets of 3. How many sets does Toby have?



12 action figures

Problem Solving



Use the table for 3–6.

3. If a gardener plants the rose bushes into 7 equal rows, how many bushes are in each row?

4. If Mia puts the box plants into 3 equal rows, how many plants will be in each row?

5. Lawrence arranges the azalea and box plants into 6 equal rows. How many plants are in each row?

Plants at the Nursery	
Plant	Number in all
Rose bush	35
Azalea	15
Box plant	21
Lilac bush	25

6. Mrs. Kimura wants to put an equal number of azalea plants and lilac bushes into 5 equal rows. How many plants will be in each row?

Fill in the bubble completely to show your answer.

7. Ethan has 24 baseball cards that he divides among himself and 3 friends. How many cards does each person get?
- (A) 6
(B) 8
(C) 21
(D) 27
8. Beth sews an equal number of buttons onto 6 puppets. If she has 42 buttons, how many buttons does each puppet get?
- (A) 9
(B) 6
(C) 7
(D) 8
9. Susi buys 4 boxes of granola bars. She buys 20 bars in all. How many granola bars are in each box?
- (A) 16
(B) 5
(C) 4
(D) 24
10. A group of 35 scouts go on a camping trip. If the scouts sleep in tents in groups of 5, how many tents will they need?
- (A) 8
(B) 7
(C) 30
(D) 9
11. **Multi-Step** Ms. McCall divides 24 crayons among her 4 students. Then, she divides 28 markers among her 4 students. How many more markers will each of the students get than crayons?
- (A) 4
(B) 2
(C) 1
(D) 10
12. **Multi-Step** There are 27 plums divided equally in 3 bowls and 35 apricots divided equally into 7 bowls. How many more plums than apricots are there in one bowl of each?
- (A) 12
(B) 3
(C) 5
(D) 4

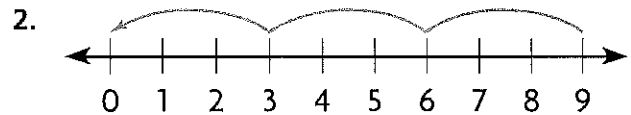


Name _____

10.4 Relate Subtraction and Division

Write a division equation.

$$1. \quad \begin{array}{r} 14 \\ -7 \\ \hline 7 \end{array} \qquad \begin{array}{r} 7 \\ -7 \\ \hline 0 \end{array}$$

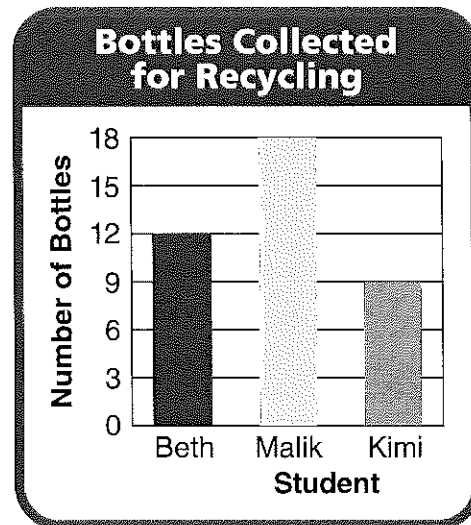


Problem Solving

Use the graph for 3-6.

3. Beth sorts an equal number of her bottles into 3 bins. How many bottles are in each bin?

4. Malik and Kimi combine their bottles, then sort an equal number of each into 3 bins. How many bottles are in each bin?



5. Kimi collects another 7 bottles and sorts an equal number into 4 bins. How many bottles are in each bin?

6. All of the students want to combine their bottles and sort an equal number into 6 bins. Can they do this? **Explain.**

Fill in the bubble completely to show your answer.

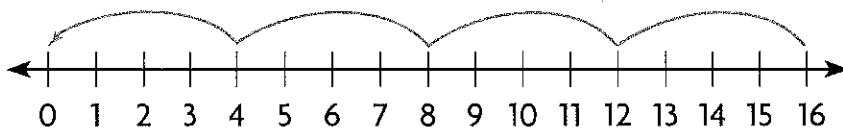
7. Wendy draws this number line.



Which division equation does she show?

- (A) $12 \div 6 = 2$ (C) $12 \div 3 = 4$
 (B) $2 \times 6 = 12$ (D) $12 \div 4 = 3$

8. Tomas draws this number line.



Which division equation does he show?

- (A) $16 \div 8 = 2$ (C) $4 \times 4 = 16$
 (B) $16 \div 2 = 8$ (D) $16 \div 4 = 4$

9. Kev bakes 18 mini-pies. There are 6 pies on each tray. How many trays does Kev use?

- (A) 12
 (B) 6
 (C) 4
 (D) 3

10. Keesha has 14 shoes in all. How many pairs of shoes does Keesha have?

- (A) 7
 (B) 2
 (C) 28
 (D) 14

11. **Multi-Step** Tara has 32 beads. She takes out 4 red beads, then sorts the rest into 4 equal groups. How many beads are in each group?

- (A) 7 (C) 8
 (B) 4 (D) 9

12. **Multi-Step** Jeff has a booklet of 30 stickers. He uses one page of stickers. If there are 6 stickers on each page, how many pages were left?

- (A) 4 (C) 5
 (B) 24 (D) 6



Name _____

10.5 Model with Arrays

Make an array. Then write a division equation.

1. 21 tiles in 3 rows

2. 36 tiles in 6 rows

3. 16 tiles in 8 rows

4. 18 tiles in 3 rows

5. How many rows of 4 are in 32?

6. How many rows of 4 are in 16?

Problem Solving



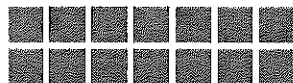
7. Hannah has a collection of 27 seashells. She wants to put 9 shells on each shelf. How many shelves does Hannah need?

8. Dexter buys 18 fish. He wants to put an equal number of fish into 3 fishbowls. How many fish will he put in each fishbowl?

9. Quentin is making a tile design with 35 tiles. He wants to put the tiles in rows. How can he set up the tiles so there are an equal number of tiles in each row?

Fill in the bubble completely to show your answer.

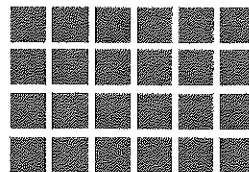
10. Marla makes this array.



What division equation can she write?

- (A) $14 \div 3 = 7$
- (B) $14 \div 2 = 7$
- (C) $2 \times 7 = 14$
- (D) $7 + 7 = 14$

11. Claude makes this array.



What division equation can he write?

- (A) $24 \div 4 = 6$
- (B) $24 \div 3 = 8$
- (C) $4 \times 6 = 24$
- (D) $6 \times 4 = 20$

12. Sondra runs for 32 minutes. If she runs 4 miles, how many minutes does it take her to run one mile?

- (A) 6 minutes
- (B) 7 minutes
- (C) 8 minutes
- (D) 28 minutes

13. There are 25 students on the playground. The students are in teams of 5. How many teams are on the playground?

- (A) 6
- (B) 5
- (C) 4
- (D) 7

14. **Multi-Step** Jennifer collects 9 animal cards and 21 nature cards. She wants to arrange them on a bulletin board in 6 rows. How many cards will be in each row?

- (A) 5
- (B) 2
- (C) 3
- (D) 7

15. **Multi-Step** Zach is planting a garden of 27 tomato plants. He puts the plants into rows of 9. If he has already planted one row, how many more rows does he need to plant?

- (A) 3
- (B) 2
- (C) 18
- (D) 4