



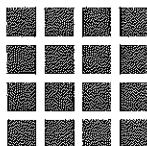
Name _____

11.1 Write Related Facts

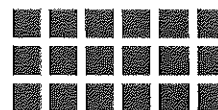
ALGEBRA

Write the related facts for the array.

1.



2.



Complete the related facts.

3. _____ \times 4 = 32

4. 7 \times _____ = 35

5. 7 \times _____ = 63

_____ \times 8 = 32

_____ \times 7 = 35

9 \times _____ = 63

_____ \div 4 = 8

_____ \div 5 = 7

_____ \div 7 = 9

32 \div _____ = 4

35 \div _____ = 5

63 \div _____ = 7

Problem Solving

6. Ms. Cohn divides 21 markers equally among 7 students. Write an equation to show how many markers each student gets. Then write a related fact.

7. Bethany makes an array of 5 rows of 5 tiles. What multiplication and related division equation can Bethany write about her array?

Fill in the bubble completely to show your answer.

8. Sheila has 24 coins in a coin book. The coins are in rows of 4. Which equation gives the related fact for the number of coins in each row?
- (A) $24 \div 3 = 8$
(B) $4 \times 6 = 24$
(C) $3 \times 8 = 24$
(D) $24 \div 8 = 3$
9. Jared has 4 boxes. He puts 9 toy cars in each box. Which equation gives the related fact for the number of toy cars Jared has in all?
- (A) $36 = 9 \times 4$
(B) $36 = 6 \times 6$
(C) $36 \div 6 = 6$
(D) $36 \div 3 = 12$
10. Which equation is NOT included in the same set of related facts as $7 \times 6 = 42$?
- (A) $6 \times 7 = 42$
(B) $7 \times 7 = 49$
(C) $42 \div 6 = 7$
(D) $42 \div 7 = 6$
11. Which equation is NOT included in the same set of related facts as $6 \times 9 = 54$?
- (A) $54 \div 6 = 9$
(B) $9 \times 6 = 54$
(C) $54 \div 9 = 54$
(D) $3 \times 18 = 54$
12. **Multi-Step** Enrico makes an array of 3 rows of 4 tiles. He writes $3 \times 4 = 12$ and $3 + 4 = 12$. He says these are related facts. Which statement is true about Enrico's equations?
- (A) They are related facts.
(B) Only 3×4 is a related fact.
(C) Only $3 + 4$ is a related fact.
(D) Both are not related facts.
13. **Multi-Step** Maria makes an array of 4 rows of 5 tiles. She wants to make an array to show the fact 5×5 . What can she do to change the array to show 5×5 as a related fact?
- (A) Add one row of 5 tiles.
(B) Add 5 rows of 5 tiles.
(C) Take away one row of 5 tiles.
(D) Add 4 more tiles.

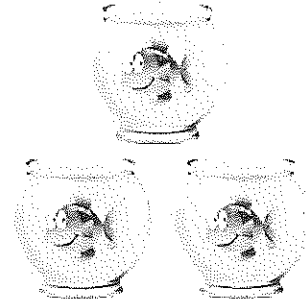
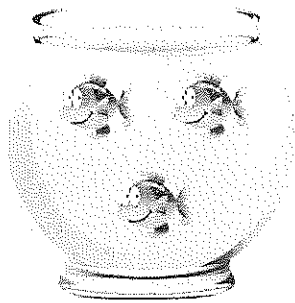


Name _____

11.2 Division Rules for 1 and 0

1. Use the picture to find $3 \div 1$. _____

2. Use the picture to find $3 \div 3$. _____



Find the quotient.

3. $8 \div 1 =$ _____

4. $5 \div 5 =$ _____

5. $0 \div 9 =$ _____

6. $2 \div 2 =$ _____

7. $0 \div 6 =$ _____

8. $4 \div 1 =$ _____

Problem Solving

9. Angie has 8 muffins. She wraps up 4 muffins. She divides the other muffins among 3 friends and herself. How many muffins does each person get?

10. Walt has 5 vases. He has no flowers to put in the vases. Write a division sentence to show how many flowers he can put in each vase.

11. Look back at Problem 10. Change the number of flowers and vases so you can use the equation $7 \div 7 = 1$.



Fill in the bubble completely to show your answer.

12. There are 10 people waiting for the bus. There are no seats left on the bus. Which division equation describes how many people can get on the bus?
- (A) $10 \div 10 = 1$
(B) $10 \times 0 = 0$
(C) $10 \div 1 = 10$
(D) $0 \div 10 = 0$
13. A group of 9 people are going on a trip. The van can seat 6 people. Which division equation shows how many people can get on the van?
- (A) $9 \times 1 = 9$
(B) $6 \times 1 = 6$
(C) $9 \div 9 = 1$
(D) $6 \div 1 = 6$
14. There are some students on the playground. Each student has a seat on the swings. There are 6 swing seats. How many students are on the swings?
- (A) 0
(B) 6
(C) 1
(D) 12
15. A day care center has some babies. Each baby has a bottle. There are 8 bottles. How many babies are in the day care center?
- (A) 16
(B) 0
(C) 1
(D) 8
16. **Multi-Step** Len has a box of 8 granola bars. He leaves 5 bars in the box and divides the rest among 2 friends and himself. How many granola bars does each person get?
- (A) 1
(B) 5
(C) 2
(D) 8
17. **Multi-Step** Sonya has a pack of 12 crayons. She leaves 0 crayons in the box and divides the rest equally among 11 students and herself. How many crayons is each student given?
- (A) 0
(B) 1
(C) 12
(D) 11



Name _____

11.3 Even and Odd Numbers

ALGEBRA

Tell if the product will be *odd* or *even*.

1. 37×41 _____

2. 56×9 _____

3. 64×88 _____

4. 13×50 _____

Circle the numbers divisible by 2.

5. 113

6. 572

7. 488

8. 326

9. 631

10. 234

Problem Solving



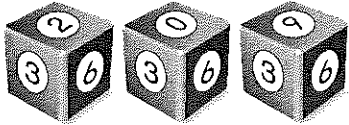
11. Kenji writes the numbers 4,230 and 5,607. He says that both numbers are divisible by 2. Is Kenji correct? **Explain.**

12. Kara uses some buttons to decorate 6 puppets. She uses 8 buttons on each puppet. Will the number of buttons Kara uses be an even or an odd number? **Explain.**

13. Miguel has a group of 17 red counters and a group of 13 yellow counters. He arranges the counters into stacks of 5. Does he have an odd or even number of stacks? **Explain.**

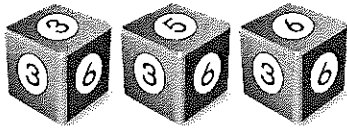
Fill in the bubble completely to show your answer.

14. Harry tosses three number cubes to make this number.



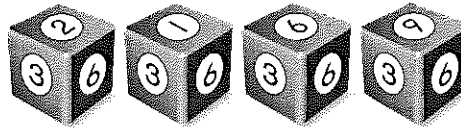
Which is true about Harry's number?

- (A) It is even because there is a 2 in the hundreds place.
 - (B) It is even because there is a 0 in the tens place.
 - (C) It is odd because there is a 9 in the ones place.
 - (D) It is even because is it divisible by 2.
15. Dale tosses three number cubes shown below.



Which is an even number Dale can make from the numbers?

- (A) 536
 - (B) 635
 - (C) 563
 - (D) 365
16. Gerard tosses four number cubes shown below.



Which set of numbers that Gerard makes are all odd?

- (A) 216, 619, 926
 - (B) 169, 921, 269
 - (C) 692, 961, 219
 - (D) 926, 261, 692
17. **Multi-Step** A mystery number is odd and has 2 digits. The sum of the digits is 11. The digit in the tens place is between 0 and 3. What is the mystery number?
- (A) 29
 - (B) 38
 - (C) 47
 - (D) 56
18. **Multi-Step** A mystery number is even and has 2 digits. The difference between the digits is 3. The digit in the ones place is between 0 and 4. What is the mystery number?
- (A) 30
 - (B) 63
 - (C) 74
 - (D) 52