

### **TABE**

Math-E

# Unit-3 Multiply and Divide Whole Numbers

## **REVIEW**

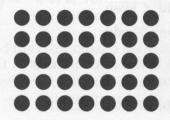
Revised: October 16, 2023 Nolan Tomboulian

Some graphics may not have copied well during the scan process.

### Math-E - Unit 3 - Review

#### Read each question. Select the correct answer.

1. Holly uses the array to multiply 5 × 7. Which answer shows how she uses repeated addition to solve?

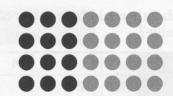


- **A.** 7 + 7 + 7 + 7 + 7 + 7 + 7 = 35
- **B.** 5 + 5 + 5 + 5 = 35
- **C.** 7 + 7 + 7 + 7 + 7 = 35
- **D.** 5 + 7 = 35
- 2. What is the missing factor?

$$9 \times _{---} = 54$$

- A. 12
- B. 9
- C. 6
- **D.** 3
- 3. What is the value of 7 groups of 10?
  - A. 17
  - B. 70
  - C. 71
  - D. 700
- **4.** Terry buys 5 passes to the museum. Each pass costs \$10. How much does Terry pay?
  - A. \$5
  - **B.** \$10
  - C. \$15
  - D. \$50

- 5. Sammie wants to find the missing factor in  $7 \times \underline{\hspace{1cm}} = 28$ . What other equation could she use to find the missing factor?
  - **A.**  $28 \div 7 =$
  - **B.**  $7 \times 28 =$
  - C.  $7 \div 28 =$
  - **D.**  $28 \times _{---} = 7$
- **6.** What is  $7 \times 3 \times 2$ ?
  - A. 42
  - B. 40
  - C. 35
  - D. 12
- 7. Allie multiplies  $5 \times 4$ . Jeremiah multiplies  $4 \times 5$ . They both get 20. Who is correct?
  - **A.** Allie is correct because  $5 \times 4 = 20$ .
  - **B.** Jeremiah is correct because  $4 \times 5 = 20$ .
  - C. Neither Allie nor Jeremiah is correct.
  - **D.** Both Allie and Jeremiah are correct because when the order of two factors is reversed, the product remains the same.
- 8. Molly uses the array to solve 4 × 7. She uses the distributive property to break apart the array into two smaller multiplication problems. Which equation best represents the array?



- **A.**  $(4 \times 3) + (4 \times 4) = 28$
- **B.**  $(4 \times 4) + (4 \times 4) = 28$
- **C.**  $(4 \times 3) + (4 \times 3) = 24$
- **D.**  $(3 \times 3) + (4 \times 4) = 25$

### Math-E - Unit 3 - Review

- 9. Which factor multiplied by 3 results in a product of 24?
  - **A.** 6

B. 8

C. 12

- D. 24
- 10. Which scenario is best represented by the equation  $36 \div 4$ ?
  - **A.** There are 36 dumbbells on each of the 4 racks at the gym.
  - **B.** There are 36 dumbbells at the gym. There are an equal number of dumbbells on each of the 4 racks.
  - C. There are 4 dumbbells on each of the 36 racks at the gym.
  - **D.** There are 36 black dumbbells and 4 silver dumbbells at the gym.
- 11. Liz uses a fact family to solve the equation  $4 \times \underline{\hspace{1cm}} = 40$ .

What number fills in both blanks?

A. 4

**B.** 8

C. 10

- D. 12
- 12. Andrea shares 36 pastries equally into 6 boxes. Then she decides to remove one pastry from each box. How many pastries are in each box now?
  - A. 35

B. 7

C. 6

- **D.** 5
- 13. Evan uses the array to multiply. Which equation represents the problem?



- **A.** 5 + 5 = ?
- **B.**  $5 \div 3 = ?$
- **C.**  $5 \times 3 = ?$
- **D.**  $15 \times 3 = ?$

- 14. Daniel multiplies  $7 \times 2$  and gets 14. He then multiplies  $4 \times 2$  and gets 8. He notices that both products are even. What pattern can explain this?
  - A. When any number and an odd number are multiplied, the product is always odd.
  - **B.** When any number and an even number are multiplied, the product is always even.
  - C. When an even number and an even number are multiplied, the product is always odd.
  - **D.** When an odd number and an odd number are multiplied, the product is always even.
- 15. Ava arranges 12 books on each of the 5 shelves of her bookcase. Which equation represents how many books Ava places on the bookcase?
  - **A.**  $12 \div 5 = 7$
- **B.**  $12 \times 5 = 50$
- C. 12 + 5 = 17
- **D.**  $12 \times 5 = 60$
- 16. Bennet wants to multiply  $6 \times 7$ . Select the two equations that could help him solve the problem.

A. 
$$7 \times 6 =$$

**B.** 
$$=$$
  $\div$  7 = 6

C. 
$$6 + 7 =$$

**D.** 
$$7 \div 6 =$$

**E.** 
$$6 \div 7 =$$

- 17. Alexa orders lunch for her coworkers. Lunch costs \$8 per person. She orders food for 11 people. Then she uses a coupon worth \$10 off the total cost. How much does Alexa spend?
  - A. \$70
- **B.** \$78
- C. \$80

- **D.** \$88
- **18.** What is  $(5 \times 3) + (7 \times 3)$ ?
  - A. 37

**B.** 35

C. 36

**D.** 32

### Math-E - Unit 3 - Review

#### Unit 3

### Review: Operations: Multiplication and Division

- 1. C. The array shows 5 groups of 7. 3.OA.1
- **2.** C.  $54 \div 9 = 6$ , so  $9 \times 6 = 54$ . 3.0A.4
- **3.** B.  $7 \times 10 = 70$ . 3.NBT.3, 2.NBT.2
  - 4. D.  $5 \times 10 = 50$ . 3.NBT.3, 2.NBT.2
  - **5.** A. When a multiplication problem is restated as a division problem, the product becomes the dividend and the known factor becomes the divisor. 3.OA.7
  - **6.** A.  $7 \times 3 = 21$ ,  $21 \times 2 = 42$ . 3.OA.5
  - **7. D.** Both Allie and Jeremiah are correct because when the order of two factors is reversed, the product remains the same. 3.OA.5
  - **8.** A.  $4 \times 3 = 12$ ,  $4 \times 4 = 16$ , 12 + 16 = 28. 3.0A.5
  - **9.** B.  $24 \div 3 = 8$ , so  $3 \times 8 = 24$ . 3.OA.6
  - **10. B.** The 36 dumbbells are divided into 4 equal groups. 3.OA.2
  - 11. C. When a multiplication problem is restated as a division problem, the product becomes the dividend and the known factor becomes the divisor;  $4 \times 10 = 40$ ;  $40 \div 10 = 4$ . 3.OA.7
  - **12.** D.  $36 \div 6 = 6$ , 6 1 = 5. 3.OA.8
  - 13. C. There are 5 groups of 3 dots. 3.OA.3
  - **14.** B. Any number times an even number results in a product that is an even number. 3.OA.9
  - **15.** D. This is a multiplication situation. There are 5 groups of 12. 3.0A.3
  - **16. A, B.** Reversing the order of the factors does not change the product. The inverse of multiplication is division.  $7 \times 6 = 42$ ;  $42 \div 7 = 6$  3.OA.5
  - **17.** B.  $8 \times 11 = 88$ , 88 10 = 78. 3.OA.8
  - **18.** C.  $5 \times 3 = 15$ ,  $7 \times 3 = 21$ , 15 + 21 = 36. 3.OA.5

### Math-E - Practice Unit-3 Review

1. Which story about equal groups could describe the array?



- A. There are five shelves. Each shelf has eight cans of soup.
- B. There are five shelves. Each shelf has seven cans of soup.
- C. There are four shelves. Each shelf has eight cans of soup.
- D. There are four shelves. Each shelf has four cans of soup.
- 2. Alberta starts a windowsill flower garden. She has 36 seeds and wants to put an equal number of seeds in four pots. Which model shows how many seeds Alberta should put in each pot?









3. Jordan is preparing prizes for the top five finishers of a golf tournament.

He makes five gift bags. Each gift bag contains six boxes of golf balls and one golf shirt. Each box holds eight golf balls.

How many golf balls does Jordan buy?

- A. 180 golf balls
- B. 240 golf balls
- C. 320 golf balls
- D. 336 golf balls

- 4. Vihaan makes \$9 per hour at a temp agency. He works 8 hours per day. How much does Vihaan earn per day?
  - A. \$72

B. \$64

C. \$63

D. \$17

5. Which multiplication fact can help you find a solution to  $63 \div 7$ ?

A.  $5 \times 9 =$ 

B.  $9 \times 7 =$ 

C.  $9 \times 10 =$ 

D.  $9 \times 15 =$ 

6. Zoe works at a parts manufacturing company. She makes 60 parts each five-day workweek. Which fact family shows how many parts Zoe makes per day?

A. 
$$5 + 55 = 60$$
;  $60 - 55 = 5$ ;  $55 + 5 = 60$ ;  $60 - 5 = 55$ 

B. 
$$60 \div 1 = 60$$
;  $1 \times 60 = 60$ ;  $60 \div 60 = 1$ ;  $60 \times 1 = 60$ 

C. 
$$60 \div 4 = 15; 4 \times 15 = 60;$$
  
 $60 \div 15 = 4; 15 \times 4 = 60$ 

D. 
$$60 \div 5 = 12$$
;  $5 \times 12 = 60$ ;  $60 \div 12 = 5$ ;  $12 \times 5 = 60$ 

- 7. Marcel is calculating his typing speed.
  Only correct words are considered. In
  three minutes, Marcel types 120 words.
  However, he makes 15 mistakes. How
  many words per minute does Marcel
  type?
  - A. 45 words per minute
  - B. 40 words per minute
  - C. 35 words per minute
  - D. 30 words per minute
- 8. Dental hygienists clean 30 patients' teeth each day at the Happy Smile Dental Clinic. The dental clinic is open six days a week. How many patients get their teeth cleaned each week?
  - A. 120 patients
  - B. 150 patients
  - C. 180 patients
  - D. 200 patients

### Math-E - Practice - Unit-3 Review

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What number fills in both blanks?

A. 4

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- D. 12
- 12. Andrea shares 36 pastries equally into 6 boxes. Then she decides to remove one pastry from each box. How many pastries are in each box now?
  - A. 35

B. 7

C. 6

- D. 5
- 13. Evan uses the array to multiply. Which equation represents the problem?



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- **B.**  $5 \div 3 = ?$
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  - **B.** =  $\div$  7 = 6
  - C. 6 + 7 =
  - **D.**  $7 \div 6 =$
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    - A. \$70
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  - A. 37

**B.** 35

C. 36

**D.** 32

### Math-E - Practice - Unit-3 Review

#### Unit 3

### Review: Operations: Multiplication and Division

pp. 52-53

- 1. C. The array represents 4 groups of 8 because there are 4 rows in the array and 8 dots in each row. 3.OA.1
- **2.** B.  $36 \div 4 = 9$ ; Alberta should put 9 seeds in each pot. 3.OA.2
- 3. B. The product of  $5 \times 6$  is 30. The product of  $30 \times 8$  is 240. Jordan buys 240 golf balls. 3.0A.5
- **4.** A. Vihaan earns \$72 per day. Multiply  $9 \times 8$  to get 72. To solve using repeated addition, add 9 + 9 + 9 + 9 + 9 + 9 + 9 + 9 = 72. 2.NBT.2
- **5.** B.  $63 \div 7 = 9$ ; therefore,  $9 \times 7 = 63$ . 3.OA.6
- 6. D.  $60 \div 5 = 12$  because  $5 \times 12 = 60$ . The fact family also includes  $60 \div 12 = 5$  because  $12 \times 5 = 60$ . 3.0A.7
- 7. C. Marcel makes 15 mistakes: 120 15 = 105 words typed correctly.  $105 \div 3 = 35$ . Marcel types 35 words per minute. 3.OA.3
- **8.** C. To solve  $6 \times 30$ , multiply 6 by 3 tens to get 18 tens. Multiply 18 by 10 to get 180. The dental hygienists clean 180 patients' teeth each week. 3.NBT.3
- 9. A. Three full charges of the hearing aid give Fatima 60 hours because  $3 \times 20 = 60$ ; 60 45 = 15. Fatima can use her hearing aid for 15 more hours before she has to charge it. 3.0A.8
- **10.** D. Multiply 5 by 5 tens to get 25 tens. Multiply 25 by 10 to get 250. 3.NBT.3
- 11. A. There are 4 equal groups of 5, so 5 + 5 + 5 + 5 can be represented as  $5 \times 4$ . 3.0A.1
- **12.** B. There are 5 rows of 10:  $5 \times 10 = 50$ . 3.0A.4
- **13.** B, E. 8 groups of 5 make 40, so  $8 \times 5 = 40$  or 5 + 5 + 5 + 5 + 5 + 5 + 5 + 5 + 5 = 40. 3.0A.7
- **14.** A.  $5 \times 12 = 60$ ; therefore  $60 \div 5 = 12$ . Santiago should complete 12 practice problems each day before his test. 3.0A.6
- 15. C.  $4 \times 27 = (4 \times 20) + (4 \times 7) = 80 + 28 = 108$ . Eshan changed 108 tires on Saturday. 3.OA.5
- 16. B. Each set of numbers is increasing. The pattern involves multiplication. To find the relationship, divide the first output by the first input:  $55 \div 5 = 11$ , so  $5 \times 11 = 55$ . Check that the other inputs and outputs have the same relationship.  $6 \times 11 = 66 \dots 8 \times 11 = 88$ . The pattern is multiply the day by 11. 3.0A.9