



# TABE Math-E

## PAXEN

### Unit-3 Multiply and Divide Whole Numbers

#### Lesson 15 Multiplication Within 100

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

# Math-E - Lesson 15 – Multiplication

Multiplication is adding equal groups or amounts of something. The numbers that are multiplied are called *factors*. The answer is called the *product*.

$$\begin{array}{c} 3 \times 4 = 12 \\ \text{factors} \quad \text{product} \end{array}$$

Knowing your multiplication facts will help you solve multiplication problems.

×	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10
2	2	4	6	8	10	12	14	16	18	20
3	3	6	9	12	15	18	21	24	27	30
4	4	8	12	16	20	24	28	32	36	40
5	5	10	15	20	25	30	35	40	45	50
6	6	12	18	24	30	36	42	48	54	60
7	7	14	21	28	35	42	49	56	63	70
8	8	16	24	32	40	48	56	64	72	80
9	9	18	27	36	45	54	63	72	81	90
10	10	20	30	40	50	60	70	80	90	100

**Example** Jess will put new tile in the kitchen. He has 9 boxes of tiles. Each box holds 8 tiles. How many tiles does Jess have for the job?

1) Think: What does the problem ask you to find?

The problem asks for the total number of tiles Jess has for the job.

2) Think: What information tells how the total is made?

There are 9 boxes of tiles, and each box has 8 tiles.

So, there are 9 equal groups of 8.

3) Think: How do you find the total when you have equal groups?

You multiply the number of groups by the number in each group.

4) Multiply the 9 boxes by the 8 tiles in each box:  $9 \times 8 = 72$ .

Jess has 72 tiles for the job.

## Test Example

1. Irina's yoga group has been meeting 3 days every week for the past 6 weeks. Irina has attended every meeting. How many days has Irina met with the group?

- A. 9 days                      B. 12 days  
C. 17 days                    D. 18 days

1. D 6 weeks times 3 days each week is 6 groups of 3;  $6 \times 3 = 18$ .

## Strategy

When you need to find the total of something, think what you need to put together to make the total.

# Math-E - Lesson 15 – Multiplication

Read each question. Select the correct answer.

- 1 There are 9 rows of chairs in the auditorium. There are 10 chairs in each row. Brenda wants to know how many chairs are in the auditorium. Which equation shows how she can solve the problem?
- A.  $9 \times 10 =$  \_\_\_\_\_  
B.  $9 + 9 + 9 + 9 + 9 + 9 + 9 + 9 + 9 =$  \_\_\_\_\_  
C.  $9 + 10 =$  \_\_\_\_\_  
D.  $9 = 10 \times$  \_\_\_\_\_
- 2 Zeke is making fruit packs. Each pack holds 8 pieces of fruit. Zeke wants to make 5 packs. How many pieces of fruit does he need?
- A. 13                      B. 32  
C. 35                      D. 40
- 3 What is  $4 \times 6$ ?
- A. 10                      B. 16  
C. 24                      D. 28
- 4 What is  $8 \times 7$ ?
- A. 56                      B. 58  
C. 60                      D. 63
- 5 What is the next multiplication fact?
- $5 \times 4 = 20$   
 $5 \times 5 = 25$   
 $5 \times 6 = 30$   
\_\_\_\_\_
- A.  $5 \times 7 = 35$   
B.  $5 \times 7 = 40$   
C.  $6 \times 6 = 36$   
D.  $6 \times 6 = 42$
- 6 In a restaurant, there are 4 tables with 8 chairs at each table. Which equation can be used to find how many chairs are in the restaurant?
- A.  $8 \times 4 = 24$   
B.  $4 \times 8 = 32$   
C.  $8 = 4 \times 2$   
D.  $8 \times 2 = 4$
- 7 What is  $8 \times 6$ ?
- A. 14  
B. 24  
C. 48  
D. 56
- 8 What is  $5 \times 9$ ?
- A. 17  
B. 45  
C. 60  
D. 65
- 9 Tia went on a hike Saturday morning. She hiked for 4 hours. She hiked 3 miles each hour. How many miles was Tia's hike?
- A. 7  
B. 12  
C. 14  
D. 15
- 10 There are 7 days in a week. How many days are there in 7 weeks?
- A. 39  
B. 42  
C. 45  
D. 49

# Math-E - Lesson 15 – Multiplication

## Lesson 15

## Multiply Within 100

(3.OA.7)

1. A. 9 groups of chairs times 10 chairs in each group
2. D. 5 groups of 8 make 40, or  $5 \times 8 = 40$ . Zeke needs 40 pieces of fruit.
3. C.  $4 \times 6 = 24$
4. A.  $8 \times 7 = 56$
5. A. The pattern is the fives pattern, so the next fact is  $5 \times 7 = 35$ .
6. B. 4 groups of 8 make 32, or  $4 \times 8 = 32$ .
7. C.  $8 \times 6 = 48$
8. B.  $5 \times 9 = 45$
9. B. 4 groups (hours) of 3 (miles) make 12, or  $4 \times 3 = 12$ . Tia's hike is 12 miles.
10. D. 7 groups (weeks) of 7 (days) make 49, or  $7 \times 7 = 49$ .

# Math-E - Practice 15 - Multiplication

- 1 What is the product of  $3 \times 9$ ?  
A. 28  
B. 27  
C. 24  
D. 21
- 2 Donoma drinks five glasses of water every day. Each glass contains seven ounces of water. How much water does Donoma drink each day?  
A. 35 oz  
B. 30 oz  
C. 28 oz  
D. 12 oz
- 3 Kenji is stocking a grocery store shelf. He has four boxes to unload. Each box contains nine bags of pretzels. How many bags of pretzels does Kenji put on the shelf?  
A. 40 bags  
B. 36 bags  
C. 32 bags  
D. 28 bags
- 4 What is  $8 \times 9$ ?  
A. 72  
B. 70  
C. 64  
D. 63
- 5 Jasmine has a vegetable garden. She has two tomato plants. There are seven tomatoes on each plant. How many tomatoes does Jasmine have in her garden?  
A. 16 tomatoes  
B. 15 tomatoes  
C. 14 tomatoes  
D. 12 tomatoes
- 6 Katia is a potter. She makes eight bowls each day. How many bowls does Katia make after eight days?  
A. 56 bowls  
B. 58 bowls  
C. 60 bowls  
D. 64 bowls
- 7 What is  $6 \times 2$ ?  
A. 8  
B. 10  
C. 12  
D. 14
- 8 What is the product of  $4 \times 7$ ?  
A. 21  
B. 24  
C. 27  
D. 28
- 9 A marine life center has six aquariums. Each contains three turtles. Which two equations show how to find the total number of turtles?  
A.  $6 + 3 = \underline{\quad}$   
B.  $6 \times 3 = \underline{\quad}$   
C.  $6 \times 6 = \underline{\quad}$   
D.  $3 + 3 + 3 + 3 + 3 + 3 = \underline{\quad}$   
E.  $3 + 6 + 3 + 6 + 3 + 6 = \underline{\quad}$   
F.  $6 + 6 + 6 + 6 + 6 + 6 = \underline{\quad}$
- 10 A farmer sells apples in packages of five at the local farmer's market. How many apples are there in six packages?  
A. 11 apples  
B. 20 apples  
C. 25 apples  
D. 30 apples

# Math-E - Practice 15 Multiplication

- 11 In football, a touchdown and an extra point is worth seven points. The Mad Dogs score six touchdowns and extra points. What is the Mad Dogs' score?
- A. 42 points
  - B. 40 points
  - C. 36 points
  - D. 32 points
- 12 Fiona reads four pages each minute for five minutes. Which equation shows how to find the number of pages Fiona reads in all? How many pages does Fiona read in all?
- A.  $4 + 5 = \underline{\quad}$ ; 9 pages
  - B.  $4 + 4 + 4 + 4 = \underline{\quad}$ ; 16 pages
  - C.  $4 + 5 + 4 + 5 = \underline{\quad}$ ; 18 pages
  - D.  $4 \times 5 = \underline{\quad}$ ; 20 pages
- 13 A carton of nails has a mass of two kilograms. What is the mass of eight cartons of nails?
- A. 10 kg
  - B. 12 kg
  - C. 14 kg
  - D. 16 kg
- 14 What is the product of  $5 \times 3$ ?
- A. 18
  - B. 16
  - C. 15
  - D. 1
- 15 Kiran is making granola. Each serving contains seven ounces of oats. He makes nine servings of granola. Which equation shows how many ounces of oats Kiran uses?
- A.  $7 + 9 = \underline{\quad}$
  - B.  $9 + 9 = \underline{\quad}$
  - C.  $9 \times 7 = \underline{\quad}$
  - D.  $9 \times 9 = \underline{\quad}$
- 16 It rains four centimeters each hour. After six hours, how much rain has fallen?
- A. 28 cm
  - B. 24 cm
  - C. 21 cm
  - D. 20 cm
- 17 A marching band is arranged in six columns with six students in each column. How many students are in the band?
- A. 30 students
  - B. 32 students
  - C. 35 students
  - D. 36 students
- 18 An art museum has three floors. Each floor contains four rooms. Which equation shows how to find the total number of rooms in the art museum? How many rooms does the art museum have?
- A.  $3 + 4 = \underline{\quad}$ ; 7 rooms
  - B.  $3 \times 3 = \underline{\quad}$ ; 9 rooms
  - C.  $3 \times 4 = \underline{\quad}$ ; 12 rooms
  - D.  $4 + 4 + 4 + 4 = \underline{\quad}$ ; 16 rooms
- 19 Edwin plants nine rows of trees. Each row contains six trees. How many trees does Edwin plant?
- A. 54 trees
  - B. 56 trees
  - C. 60 trees
  - D. 63 trees
- 20 What is the product of  $8 \times 3$ ?
- A. 32
  - B. 24
  - C. 20
  - D. 18

# Math-E - Practice 15 – Multiplication

## Practice 15

## Multiply Within 100

pp. 34–35

3.OA.7

1. B.  $3 \times 9 = 27$
2. A. 5 groups (glasses) of 7 (ounces) make 35, or  $5 \times 7 = 35$ . Donoma drinks 35 ounces of water each day.
3. B. 4 groups (boxes) of 9 (bags) make 36, or  $4 \times 9 = 36$ . Kenji puts 36 bags of pretzels on the shelf.
4. A.  $8 \times 9 = 72$
5. C. 2 groups (plants) of 7 (tomatoes) make 14, or  $2 \times 7 = 14$ . Jasmine has 14 tomatoes in her garden.
6. D. 8 groups (days) of 8 (bowls) make 64, or  $8 \times 8 = 64$ . Katia makes 64 bowls.
7. C.  $6 \times 2 = 12$
8. D.  $4 \times 7 = 28$
9. B, D. 6 groups (aquariums) of 3 (turtles) make 18, so  $3 + 3 + 3 + 3 + 3 + 3 = 18$ , or  $6 \times 3 = 18$ . There are 18 turtles.
10. D. 6 groups (packages) of 5 (apples) make 30, or  $6 \times 5 = 30$ . There are 30 apples.
11. A. 7 groups (points) of 6 (touchdowns and extra points) make 42, or  $7 \times 6 = 42$ . The Mad Dogs score 42 points.
12. D. 4 groups (pages) of 5 (minutes) make 20, or  $4 \times 5 = 20$ . Fiona reads 20 pages.
13. D. 8 groups (cartons) of 2 (kilograms) make 16, or  $8 \times 2 = 16$  kilograms.
14. C.  $5 \times 3 = 15$
15. C. 9 groups (servings) of 7 (ounces) make 63, or  $9 \times 7 = 63$ . Kiran uses 63 ounces of granola.
16. B. 4 groups (centimeters) of 6 (hours) make 24, or  $4 \times 6 = 24$ . The rainfall total is 24 centimeters.
17. D. 6 groups (columns) of 6 (students) make 36, or  $6 \times 6 = 36$ . There are 36 students in the band.
18. C. 3 groups (floors) of 4 (rooms) make 12, or  $3 \times 4 = 12$ . The art museum has 12 rooms.
19. A. 9 groups (rows) of 6 (trees) make 54, or  $9 \times 6 = 54$ . Edwin plants 54 trees.
20. B.  $8 \times 3 = 24$