Chapter 4: Multiplication

A. Recall the tables of 2, 3, 4, 5 and 6. Write the missing factors.

1. 4 × ◯ = 12

2. ◯ × 3 = 9

3. 5 × ◯ = 30

4. 6 × ◯ = 36

5. ◯ × 3 = 9

6. ◯ × 3 = 18

7. 3 × ◯ = 15

8. 7 × ◯ = 35

9. ◯ × 6 = 54

10. 9 × ◯ = 18

11. 2 × ◯ = 10

12. ◯ × 5 = 40

Answers:

1. 3

2. 3

3. 6

4. 6

5. 3

6. 6

7. 5

8. 5

9. 9

10. 2

11. 5

12. 8

B. Recall the multiplication facts. Fill in the blanks.

1. ◯ × 2 = 2

2. 5 × ◯ = 5

3. ◯ × 2 = 2

4. 6 × 4 = ◯

5. ◯ × 7 = 7

6. 6 × 0 = ◯

Answers:

1. 1

2. 1

3. 1

4. 24

5. 1

6. 0

C. Fill in the blanks.

1. 5 × 4 = _____ × 5 = _____

2. 8 × 10 = 10 × _____ = _____

3. 8 × 3 = _____ × 8 = _____

4. 2 × 6 = 6 × _____ = _____

5. 7 × 2 = _____ × 7 = _____

6. 3 × 8 = 8 × _____ = _____

7. 4 × 9 = 9 × _____ = _____

8. 6 × 5 = _____ × 6 = _____

Answers:

1. 4, 20

2. 8, 80

3. 3, 24

4. 2, 12

5. 2, 14

6. 3, 24

7. 4, 36

8. 5, 30

D. Fill in the blanks.

1. 4 × 6 = _____ × 4 = _____

2. 7 × 5 = 5 × _____ = _____

3. 9 × 3 = _____ × 9 = _____

4. 6 × 8 = 8 × _____ = _____

5. 5 × 9 = _____ × 5 = _____

6. 3 × 7 = 7 × _____ = _____

7. 8 × 4 = _____ × 8 = _____

8. 2 × 10 = 10 × _____ = _____

9. 6 × 3 = 3 × _____ = _____

Answers:

1. 6, 24

2. 7, 35

3. 3, 27

4. 6, 48

5. 9, 45

6. 3, 21

7. 4, 32

8. 2, 20

9. 6, 18

E. Compare by using >, < or =

1. 6 × 7 ◯ 4 × 5

2. 8 × 8 ◯ 7 × 9

3. 2 × 9 ◯ 5 × 9

4. 5 × 8 ◯ 5 × 7

5. 4 × 8 ◯ 4 × 9

6. 3 × 4 ◯ 3 × 7

7. 6 × 9 ◯ 5 × 7

8. 9 × 8 ◯ 8 × 9

9. 4 × 7 ◯ 7 × 4

Answers:

1. >

2. >

3. <

4. >

5. <

6. <

7. >

8. =

9. =

F. Multiply without carrying:

1.

H	T	O
2	4	1
×		2
___	___	___

2.

H	T	O
1	1	2
×		4
___	___	___

3.

H	T	O
2	1	3
×		3
___	___	___

4.

H	T	O
3	2	3
×		3
___	___	___

Answers:

1. 482

2. 448

3. 639

4. 969

H. Multiply with carrying:

1. 193 × 2

2. 562 × 7

3. 389 × 4

4. 132 × 6

5. 2162 × 3

6. 1158 × 8

7. 2194 × 4

8. 478 × 5

Answers:

1. 386

2. 3934

3. 1556

4. 792

5. 6486

6. 9264

7. 8776

8. 2390

I. Multiply (2-digit x 2-digit)

1.

```
  H  T  O
     2  1
×    1  2
---------
  4 2  (21 × 2)
+ 2 1 0  (21 × 10)
---------
  2 5 2  (Answer)
```

2.

```
  H  T  O
     3  5
×    1  5
---------
  1 7 5  (35 × 5)
+ 3 5 0  (35 × 10)
---------
  5 2 5  (Answer)
```

3.

```
  H  T  O
     2  7
×    1  8
---------
  2 1 6  (27 × 8)
+ 2 7 0  (27 × 10)
---------
  4 8 6  (Answer)
```

4.

```
  H  T  O
     4  2
×    1  9
---------
  3 7 8  (42 × 9)
+ 4 2 0  (42 × 10)
```

```
---------
  7 9 8  (Answer)
```

5.

```
  H  T  O
     1  8
×    5  3
---------
    5 4  (18 × 3)
+ 9 0 0  (18 × 50)
---------
  9 5 4  (Answer)
```

6.

```
  H  T  O
     6  5
×    1  0
---------
    0 0  (65 × 0)
+ 6 5 0  (65 × 10)
---------
  6 5 0  (Answer)
```

7.

```
 Th  H  T  O
        8  2
×       3  5
------------
    4 1 0  (82 × 5)
+ 2 4 6 0  (82 × 30)
---------
  2 8 7 0  (Answer)
```

8.

```
 Th  H  T  O
        2  9
×       7  1
------------
      2 9  (29 × 1)
+ 2 0 3 0  (29 × 70)
---------
  2 0 5 9  (Answer)
```

J. Solve the following word problems.

1. A farmer packed 16 cauliflowers in a packet. He sold 68 such packets. How many cauliflowers were sold?

Number of cauliflowers in 1 packet = 16

∴ Number of cauliflowers in 68 packets = 68 × 16 = 1088 cauliflowers

2. A cook used 2 brinjals to cook 1 serving of a dish. How many brinjals will he need to make 525 such servings?

Number of brinjals for 1 serving = 2

∴ Number of brinjals for 525 servings = 525 × 2 = 1050 brinjals

3. There are 25 pencils in 1 box. How many pencils are there in 34 such boxes?

Number of pencils in 1 box = 25

∴ Number of pencils in 34 boxes = 34 × 25 = 850 pencils

4. A notebook has 96 pages. How many total pages are there in 15 such notebooks?

Number of pages in 1 notebook = 96

∴ Number of pages in 15 notebooks = 96 × 15 = 1440 pages

5. A toy car costs 45 rupees. How much will 22 such toy cars cost?

Cost of 1 toy car = 45

∴ Cost of 22 toy cars = 22 × 45 = 990 rupees

K. Case Studies

Case Study 1: Maya's Fruit Basket

Maya goes to a fruit market to buy fresh fruits for her class party. She buys 4 boxes of oranges. Each box contains 12 oranges. She also buys 1 packet of apples containing 10 apples.

1. How many oranges are there in 1 box?

Answer: 12 oranges

2. How many boxes of oranges did Maya buy?

Answer: 4 boxes

3. How many total oranges did Maya buy?

Number of oranges in 1 box = 12

∴ Total oranges in 4 boxes = 4 × 12 = 48 oranges

4. How many apples are there in 1 packet?

Answer: 10 apples

5. How many total fruits (oranges and apples) did Maya buy altogether?

Total oranges = 48
Total apples = 10
∴ Total fruits = 48 + 10 = 58 fruits

Case Study 2: Rahul's Sticker Album

Rahul loves collecting cartoon stickers. He organizes them neatly into an album that has 6 pages. On every page, he pastes 10 stickers. He gives 5 stickers to his best friend, Rohan.

1. **How many pages are there in Rahul's album?**
   Answer: 6 pages
2. **How many stickers are on 1 page?**
   Answer: 10 stickers
3. **How many total stickers did Rahul paste in his album?**
   Number of stickers on 1 page = 10
   ∴ Total stickers on 6 pages = 6 × 10 = 60 stickers
4. **How many stickers did Rahul give to Rohan?**
   Answer: 5 stickers
5. **How many stickers are left with Rahul now?**
   Total stickers = 60
   Given to Rohan = 5
   ∴ Stickers left = 60 - 5 = 55 stickers