



MODULE 4

Multiplying Real Life Numbers

ANSWER KEY

Part 1: The Meaning of Multiplication
Practice Your Skills

Exercise 1A

Which numbers are the factors? Which number is the product?

	factors	product
1. $2 \times 3 = 6$		
2. $6 \times 3 = 18$		
3. $8 \times 2 = 16$		
4. $2 \times 9 = 18$		

Exercise 1B

Write the number sentence.

5. Six times four equals twenty-four. _____

6. Nine times three equals twenty-seven. _____

7. Three times six equals eighteen. _____

8. Two times seven equals fourteen. _____

Exercise 1C

Write the multiplication fact.

9. $4 + 4 + 4 + 4$ _____

10. $2 + 2 + 2 + 2 + 2 + 2$ _____

11. $5 + 5 + 5 + 5 + 5$ _____

12. $7 + 7$ _____

Exercise 1D

Find the product mentally.

13. 2×2 _____

14. 2×5 _____

15. 6×2 _____

16. 8×4 _____

Exercise 2A

Find the sum and the product.

1. $\diamond \diamond \diamond \diamond \diamond \diamond$ $6 + 6 + 6 + 6 = \underline{\hspace{2cm}}$
 $\diamond \diamond \diamond \diamond \diamond \diamond$
 $\diamond \diamond \diamond \diamond \diamond \diamond$ $4 \times 6 = \underline{\hspace{2cm}}$
 $\diamond \diamond \diamond \diamond \diamond \diamond$

2. $* * * * *$ $8 + 8 + 8 = \underline{\hspace{2cm}}$
 $* * * * *$
 $* * * * *$ $3 \times 8 = \underline{\hspace{2cm}}$

Exercise 2B

Multiply.

3. $\begin{array}{r} 6 \\ \times 4 \\ \hline \end{array}$	4. $\begin{array}{r} 2 \\ \times 3 \\ \hline \end{array}$	5. $\begin{array}{r} 6 \\ \times 7 \\ \hline \end{array}$	6. $\begin{array}{r} 3 \\ \times 9 \\ \hline \end{array}$	7. $\begin{array}{r} 8 \\ \times 7 \\ \hline \end{array}$
8. $\begin{array}{r} 3 \\ \times 5 \\ \hline \end{array}$	9. $\begin{array}{r} 4 \\ \times 4 \\ \hline \end{array}$	10. $\begin{array}{r} 8 \\ \times 9 \\ \hline \end{array}$	11. $\begin{array}{r} 5 \\ \times 6 \\ \hline \end{array}$	12. $\begin{array}{r} 6 \\ \times 6 \\ \hline \end{array}$
13. $\begin{array}{r} 5 \\ \times 2 \\ \hline \end{array}$	14. $\begin{array}{r} 7 \\ \times 4 \\ \hline \end{array}$	15. $\begin{array}{r} 9 \\ \times 5 \\ \hline \end{array}$	16. $\begin{array}{r} 7 \\ \times 6 \\ \hline \end{array}$	17. $\begin{array}{r} 4 \\ \times 8 \\ \hline \end{array}$

Exercise 2C

You know that $6 \times 6 = 36$.

Estimate and tell whether the product is greater or less than 36.

18. 5×4 _____ 19. 8×7 _____ 20. 6×7 _____

21. 7×5 _____ 22. 4×8 _____ 23. 9×6 _____

Exercise 3A

Multiply.

$$\begin{array}{r} 1. \quad 3 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 7 \\ \times 1 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 6 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 5 \\ \times 0 \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 1 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 4 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad 0 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad 3 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 9. \quad 1 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 10. \quad 6 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 11. \quad 3 \\ \times 0 \\ \hline \end{array}$$

$$\begin{array}{r} 12. \quad 8 \\ \times 1 \\ \hline \end{array}$$

$$\begin{array}{r} 13. \quad 6 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 14. \quad 4 \\ \times 0 \\ \hline \end{array}$$

$$\begin{array}{r} 15. \quad 1 \\ \times 9 \\ \hline \end{array}$$

Exercise 3B

Multiply.

$$16. (4 \times 2) \times 3 \underline{\hspace{2cm}}$$

$$17. 1 \times (6 \times 3) \underline{\hspace{2cm}}$$

$$18. 4 \times (1 \times 6) \underline{\hspace{2cm}}$$

$$19. (3 \times 2) \times 2 \underline{\hspace{2cm}}$$

$$20. 6 \times 7 \times 0 \underline{\hspace{2cm}}$$

$$21. 5 \times 1 \times 6 \underline{\hspace{2cm}}$$

RealLife Math

Exercise 3C

Solve.

22. Robin baked 4 quiches for lunch. She cut each quiche into 6 pieces. How many pieces of quiche are there?

23. There are 8 packages of paper plates. Each package has 9 plates. How many plates are there in all?

24. The adult learning centre had registration for 5 days in the fall. Each day, 11 learners signed up. How many learners signed up altogether?

25. John decided to improve his diet and eat healthy food. When he did this he lost 1 kilogram each week for 8 weeks. What is the total number of kilograms that he lost?

Exercise 4A

Multiply. Count the zeros in the product.

$$\begin{array}{r} 1. \quad 1 \\ \times 6 \\ \hline \end{array} \quad \begin{array}{r} 2. \quad 10 \\ \times 6 \\ \hline \end{array} \quad \begin{array}{r} 3. \quad 100 \\ \times 6 \\ \hline \end{array} \quad \begin{array}{r} 4. \quad 500 \\ \times 6 \\ \hline \end{array} \quad \begin{array}{r} 5. \quad 1,000 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 3 \\ \times 2 \\ \hline \end{array} \quad \begin{array}{r} 7. \quad 30 \\ \times 2 \\ \hline \end{array} \quad \begin{array}{r} 8. \quad 50 \\ \times 6 \\ \hline \end{array} \quad \begin{array}{r} 9. \quad 300 \\ \times 2 \\ \hline \end{array} \quad \begin{array}{r} 10. \quad 3,000 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 11. \quad 1 \\ \times 9 \\ \hline \end{array} \quad \begin{array}{r} 12. \quad 10 \\ \times 9 \\ \hline \end{array} \quad \begin{array}{r} 13. \quad 100 \\ \times 9 \\ \hline \end{array} \quad \begin{array}{r} 14. \quad 1,000 \\ \times 9 \\ \hline \end{array} \quad \begin{array}{r} 15. \quad 5,000 \\ \times 6 \\ \hline \end{array}$$

Exercise 4B

Complete the charts.

X		1	10	100	1,000
16.	2				
17.	3				
18.	5				
19.	7				
20.	8				
X		4	40	400	4,000
21.	3				
22.	5				
23.	7				
24.	8				
25.	9				

Exercise 4C
Multiply.

$$\begin{array}{r} 26. \quad 10 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 27. \quad 100 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 28. \quad 1,000 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 29. \quad 100 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 30. \quad 2,000 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 31. \quad 30 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 32. \quad 600 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 33. \quad 1,000 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 34. \quad 5,000 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 35. \quad 100 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 36. \quad 400 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 37. \quad 8,000 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 38. \quad 100 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 39. \quad 9,000 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 40. \quad 10 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 41. \quad 3,000 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 42. \quad 200 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 43. \quad 6,000 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 44. \quad 40 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 45. \quad 500 \\ \times 3 \\ \hline \end{array}$$

RealLife Math Exercise 4D Solve.

46. There are 500 pieces in one puzzle box. How many pieces are there in 5 boxes?

47. Six thousand people went to the county fair each night. The fair lasted 8 nights. How many people went to the fair?

48. The purchasing manager ordered 400 boxes of pens. There are 8 pens in each box. How many pens were ordered?

49. There are 30 National Hockey League (NHL) teams. Each team has 20 players. How many players are there in the National Hockey League altogether?

Exercise 5A

Round the number to its greatest place.

1. 38 _____ 2. 53 _____ 3. 429 _____ 4. 781 _____

5. 3,209 _____ 6. 4,983 _____ 7. 7,007 _____ 8. 8,750 _____

Exercise 5B

Estimate the product.

9. $\begin{array}{r} 48 \\ \times 2 \\ \hline \end{array}$ 10. $\begin{array}{r} 13 \\ \times 8 \\ \hline \end{array}$ 11. $\begin{array}{r} 56 \\ \times 3 \\ \hline \end{array}$ 12. $\begin{array}{r} 81 \\ \times 4 \\ \hline \end{array}$ 13. $\begin{array}{r} 31 \\ \times 7 \\ \hline \end{array}$

14. $\begin{array}{r} 247 \\ \times 3 \\ \hline \end{array}$ 15. $\begin{array}{r} 541 \\ \times 5 \\ \hline \end{array}$ 16. $\begin{array}{r} 607 \\ \times 6 \\ \hline \end{array}$ 17. $\begin{array}{r} 894 \\ \times 4 \\ \hline \end{array}$ 18. $\begin{array}{r} 465 \\ \times 7 \\ \hline \end{array}$

19. $\begin{array}{r} 1,483 \\ \times 7 \\ \hline \end{array}$ 20. $\begin{array}{r} 3,849 \\ \times 6 \\ \hline \end{array}$ 21. $\begin{array}{r} 5,384 \\ \times 3 \\ \hline \end{array}$ 22. $\begin{array}{r} 6,812 \\ \times 5 \\ \hline \end{array}$ 23. $\begin{array}{r} 4,753 \\ \times 7 \\ \hline \end{array}$

24. $\begin{array}{r} 187 \\ \times 5 \\ \hline \end{array}$ 25. $\begin{array}{r} 2,940 \\ \times 6 \\ \hline \end{array}$ 26. $\begin{array}{r} 8,152 \\ \times 3 \\ \hline \end{array}$ 27. $\begin{array}{r} 407 \\ \times 9 \\ \hline \end{array}$ 28. $\begin{array}{r} 3,817 \\ \times 5 \\ \hline \end{array}$

Writing in Math

The word “about” can be used in many contexts. For example, the temperature is about 25 degrees. Write three sentences using the word about in three different ways.

29. _____

30. _____

31. _____

RealLife Math

Exercise 6A

Solve. Look for a pattern. Make a table if necessary.

1. Diana swims 4 laps the first day, 8 laps on the second day, 12 laps on the third day, and so on. If the pattern continues, how many laps does she swim on the seventh day?

2. There are 3 tennis balls in each can, 18 balls in 6 cans, and 21 balls in 7 cans. How many tennis balls are in 9 cans?

3. Raymond took 6 hours of tennis lessons in April, 12 hours in May, 18 hours in June, and 24 hours in July. If the pattern continues, how many hours of lessons will he have in August?

4. Leslie is knitting an afghan. The first row is blue, the second row is white, the third row is green, the fourth row is yellow, the fifth row is blue and so on. If the pattern continues, what colour is the sixteenth row?

5. Fred practices the piano 20 minutes the first day, 40 minutes the second day, 20 minutes the third day, 50 minutes the fourth day, 20 minutes the fifth day, 60 minutes the sixth day, and 20 minutes the seventh day. If this pattern continues, how long will he practice on the twelfth day?

Exercise 7A

$$\begin{array}{r} 1. \quad 12 \\ \times 6 \\ \hline \end{array} \quad \begin{array}{r} 2. \quad 18 \\ \times 9 \\ \hline \end{array} \quad \begin{array}{r} 3. \quad 42 \\ \times 2 \\ \hline \end{array} \quad \begin{array}{r} 4. \quad 63 \\ \times 5 \\ \hline \end{array} \quad \begin{array}{r} 5. \quad 48 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 23 \\ \times 7 \\ \hline \end{array} \quad \begin{array}{r} 7. \quad 33 \\ \times 8 \\ \hline \end{array} \quad \begin{array}{r} 8. \quad 78 \\ \times 9 \\ \hline \end{array} \quad \begin{array}{r} 9. \quad 67 \\ \times 5 \\ \hline \end{array} \quad \begin{array}{r} 10. \quad 22 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 11. \quad 13 \\ \times 90 \\ \hline \end{array} \quad \begin{array}{r} 12. \quad 25 \\ \times 63 \\ \hline \end{array} \quad \begin{array}{r} 13. \quad 18 \\ \times 27 \\ \hline \end{array} \quad \begin{array}{r} 14. \quad 43 \\ \times 42 \\ \hline \end{array} \quad \begin{array}{r} 15. \quad 37 \\ \times 53 \\ \hline \end{array}$$

$$\begin{array}{r} 16. \quad 55 \\ \times 27 \\ \hline \end{array} \quad \begin{array}{r} 17. \quad 34 \\ \times 49 \\ \hline \end{array} \quad \begin{array}{r} 18. \quad 62 \\ \times 35 \\ \hline \end{array} \quad \begin{array}{r} 19. \quad 49 \\ \times 53 \\ \hline \end{array} \quad \begin{array}{r} 20. \quad 45 \\ \times 45 \\ \hline \end{array}$$

$$\begin{array}{r} 21. \quad 26 \\ \times 41 \\ \hline \end{array} \quad \begin{array}{r} 22. \quad 87 \\ \times 53 \\ \hline \end{array} \quad \begin{array}{r} 23. \quad 45 \\ \times 63 \\ \hline \end{array} \quad \begin{array}{r} 24. \quad 82 \\ \times 37 \\ \hline \end{array} \quad \begin{array}{r} 25. \quad 97 \\ \times 56 \\ \hline \end{array}$$

Exercise 8A
Multiply.

1.
$$\begin{array}{r} 135 \\ \times 6 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 249 \\ \times 3 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 617 \\ \times 4 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 112 \\ \times 9 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 363 \\ \times 5 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 307 \\ \times 4 \\ \hline \end{array}$$

7.
$$\begin{array}{r} 210 \\ \times 6 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 319 \\ \times 8 \\ \hline \end{array}$$

9.
$$\begin{array}{r} 404 \\ \times 9 \\ \hline \end{array}$$

10.
$$\begin{array}{r} 684 \\ \times 2 \\ \hline \end{array}$$

11.
$$\begin{array}{r} 473 \\ \times 22 \\ \hline \end{array}$$

12.
$$\begin{array}{r} 894 \\ \times 38 \\ \hline \end{array}$$

13.
$$\begin{array}{r} 149 \\ \times 13 \\ \hline \end{array}$$

14.
$$\begin{array}{r} 426 \\ \times 26 \\ \hline \end{array}$$

15.
$$\begin{array}{r} 812 \\ \times 16 \\ \hline \end{array}$$

16.
$$\begin{array}{r} 819 \\ \times 42 \\ \hline \end{array}$$

17.
$$\begin{array}{r} 625 \\ \times 19 \\ \hline \end{array}$$

18.
$$\begin{array}{r} 527 \\ \times 33 \\ \hline \end{array}$$

19.
$$\begin{array}{r} 227 \\ \times 46 \\ \hline \end{array}$$

20.
$$\begin{array}{r} 385 \\ \times 24 \\ \hline \end{array}$$

21.
$$\begin{array}{r} 305 \\ \times 25 \\ \hline \end{array}$$

22.
$$\begin{array}{r} 618 \\ \times 22 \\ \hline \end{array}$$

23.
$$\begin{array}{r} 189 \\ \times 16 \\ \hline \end{array}$$

24.
$$\begin{array}{r} 463 \\ \times 25 \\ \hline \end{array}$$

25.
$$\begin{array}{r} 263 \\ \times 49 \\ \hline \end{array}$$

Critical Thinking

26. What is the largest product you can get by multiplying a 3-digit number by a 2-digit number?

27. What is the smallest product?

Exercise 9A
Multiply.

1. $\begin{array}{r} \$0.63 \\ \times 7 \\ \hline \end{array}$ 2. $\begin{array}{r} \$0.83 \\ \times 9 \\ \hline \end{array}$ 3. $\begin{array}{r} \$0.56 \\ \times 8 \\ \hline \end{array}$ 4. $\begin{array}{r} \$1.15 \\ \times 7 \\ \hline \end{array}$ 5. $\begin{array}{r} \$3.89 \\ \times 7 \\ \hline \end{array}$

6. $\begin{array}{r} \$5.26 \\ \times 7 \\ \hline \end{array}$ 7. $\begin{array}{r} \$13.85 \\ \times 4 \\ \hline \end{array}$ 8. $\begin{array}{r} \$22.63 \\ \times 3 \\ \hline \end{array}$ 9. $\begin{array}{r} 18.95 \\ \times 8 \\ \hline \end{array}$ 10. $\begin{array}{r} \$22.05 \\ \times 9 \\ \hline \end{array}$

11. $\begin{array}{r} \$87.89 \\ \times 4 \\ \hline \end{array}$ 12. $\begin{array}{r} \$20.10 \\ \times 5 \\ \hline \end{array}$ 13. $\begin{array}{r} \$0.89 \\ \times 25 \\ \hline \end{array}$ 14. $\begin{array}{r} \$0.62 \\ \times 39 \\ \hline \end{array}$ 15. $\begin{array}{r} \$3.78 \\ \times 42 \\ \hline \end{array}$

16. $\begin{array}{r} \$4.29 \\ \times 37 \\ \hline \end{array}$ 17. $\begin{array}{r} \$5.16 \\ \times 41 \\ \hline \end{array}$ 18. $\begin{array}{r} \$8.49 \\ \times 37 \\ \hline \end{array}$ 19. $\begin{array}{r} \$7.13 \\ \times 25 \\ \hline \end{array}$ 20. $\begin{array}{r} \$8.93 \\ \times 47 \\ \hline \end{array}$

RealLife Math

Exercise 9B

Solve.

21. Dean orders 14 roses from the florist. Each rose is \$3.25. How much money does Dean spend?

22. Vicky bowled 6 games on Saturday. Each game is \$6.90. How much did Vicky spend?

RealLife Math

Module #4 Task Based Activity: Catalogue Orders

Ordering by mail or online has become a popular way for busy people to shop. You can order food, office supplies, clothes, and movies through mail-order catalogues or online.

To order from a catalogue, you may need to complete a form and calculate the total cost of your order. Sometimes you may need to add sales tax and a shipping and handling charge.

Jana is the office manager for a print shop. She orders office supplies through a catalogue. Calculate the total cost of her order before tax.

Row No.	Item No.	Description	Price	How many?	Total Price (How many x Price)
1.	33-B	Pens	\$3.98	4	
2.	66-7	Notebooks	\$8.27	7	
3.	89-5	USB Drives	\$2.98	12	
4.	44-A	Printer cartridges	\$27.85	2	
5.	34-Z	Copy paper (case)	\$29.99	3	
6.	89-B	Sticky Notes	\$10.99	24	
			Subtotal		
			Shipping & Handling		+\$5.50
			Sub-Total		
			Tax		
			Total		

Module 4: Multiplying Whole Numbers

Review

Write the number sentence.

1. Five times six equals thirty. _____

2. Nine times eight equals seventy-two. _____

3. Seven times five equals thirty-five. _____

Multiply.

4.
$$\begin{array}{r} 5 \\ \times 0 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 1 \\ \times 8 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 10 \\ \times 9 \\ \hline \end{array}$$

7.
$$\begin{array}{r} 6 \\ \times 1 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 500 \\ \times 2 \\ \hline \end{array}$$

9.
$$\begin{array}{r} 2,000 \\ \times 7 \\ \hline \end{array}$$

10.
$$\begin{array}{r} 10 \\ \times 2 \\ \hline \end{array}$$

11.
$$\begin{array}{r} 16 \\ \times 3 \\ \hline \end{array}$$

12.
$$\begin{array}{r} 18 \\ \times 9 \\ \hline \end{array}$$

13.
$$\begin{array}{r} 22 \\ \times 3 \\ \hline \end{array}$$

14.
$$\begin{array}{r} 35 \\ \times 22 \\ \hline \end{array}$$

15.
$$\begin{array}{r} 26 \\ \times 24 \\ \hline \end{array}$$

16.
$$\begin{array}{r} 123 \\ \times 4 \\ \hline \end{array}$$

17.
$$\begin{array}{r} 189 \\ \times 6 \\ \hline \end{array}$$

18.
$$\begin{array}{r} 143 \\ \times 9 \\ \hline \end{array}$$

19.
$$\begin{array}{r} \$1.89 \\ \times 5 \\ \hline \end{array}$$

20.
$$\begin{array}{r} \$2.17 \\ \times 9 \\ \hline \end{array}$$

21.
$$\begin{array}{r} 143 \\ \times 27 \\ \hline \end{array}$$

22.
$$\begin{array}{r} 389 \\ \times 28 \\ \hline \end{array}$$

23.
$$\begin{array}{r} 561 \\ \times 32 \\ \hline \end{array}$$

Estimate the product.

24.
$$\begin{array}{r} 37 \\ \times 3 \\ \hline \end{array}$$

25.
$$\begin{array}{r} 409 \\ \times 7 \\ \hline \end{array}$$

26.
$$\begin{array}{r} 8,487 \\ \times 4 \\ \hline \end{array}$$

27.
$$\begin{array}{r} 6,734 \\ \times 5 \\ \hline \end{array}$$