

Times 10, 100 and 1,000

Every digit moves one place to the left for each 10.

Multiply. Write each digit in its new place. Draw arrows to show the moves.

	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
Example 32					3	2
× 100						
= 3,200			3	2	0	0
1. 485				4	8	5
× 10						
=						
2. 607				6	0	7
× 1,000						
=						
3. 93					9	3
× 100						
=						

Fill in the missing number.

4. 80 is 10 times
as much as _____

5. _____ is 100 times
as much as 35
6. 3,000 is _____ times
as much as 3

7. 4,700 is 10 times
as much as _____
8. In 4,400, the first 4 is worth
_____ times the second 4.

9. In 7,007, the first 7 is worth
_____ times the second 7.

Times 10, 100 and 1,000

Count every zero, even the ones already in the number.

Multiply by 10, 100 and 1,000. Look at the pattern.

Example Start with 46.

$$\begin{aligned} 46 \times 10 &= \underline{460} \\ 46 \times 100 &= \underline{4,600} \\ 46 \times 1,000 &= \underline{46,000} \end{aligned}$$

1. Start with 70.

$$\begin{aligned} 70 \times 10 &= \underline{\hspace{2cm}} \\ 70 \times 100 &= \underline{\hspace{2cm}} \\ 70 \times 1,000 &= \underline{\hspace{2cm}} \end{aligned}$$

2. Start with 125.

$$\begin{aligned} 125 \times 10 &= \underline{\hspace{2cm}} \\ 125 \times 100 &= \underline{\hspace{2cm}} \\ 125 \times 1,000 &= \underline{\hspace{2cm}} \end{aligned}$$

3. Start with 203.

$$\begin{aligned} 203 \times 10 &= \underline{\hspace{2cm}} \\ 203 \times 100 &= \underline{\hspace{2cm}} \\ 203 \times 1,000 &= \underline{\hspace{2cm}} \end{aligned}$$

Count the zeros at the end of both numbers. Then multiply.

Multiply	Zeros at the end	Product
Example 50×100	$\underline{1} + \underline{2} = \underline{3}$	$\underline{5,000}$
4. 400×10	$\underline{\hspace{1cm}} + \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$	$\underline{\hspace{2cm}}$
5. $30 \times 1,000$	$\underline{\hspace{1cm}} + \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$	$\underline{\hspace{2cm}}$
6. 610×100	$\underline{\hspace{1cm}} + \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$	$\underline{\hspace{2cm}}$

Times 100 is times 10, then times 10 again.

Example $38 \times 100 = 38 \times 10 \times 10 = \underline{380} \times 10 = \underline{3,800}$

7. $57 \times 100 = 57 \times 10 \times 10 = \underline{\hspace{2cm}} \times 10 = \underline{\hspace{2cm}}$

8. $240 \times 100 = 240 \times 10 \times 10 = \underline{\hspace{2cm}} \times 10 = \underline{\hspace{2cm}}$

Times 10, 100 and 1,000

Multiply. Then compare the products.

Example

$1,000 \times 64$ is $64 \times 1,000$: each digit moves three places to the left.

6 tens become 6 ten thousands, and 4 ones become 4 thousands: **64,000**.

Multiply. Count how many places each digit moves.

1. $23 \times 10 =$ _____	2. $9 \times 100 =$ _____	3. $1,000 \times 4 =$ _____
4. $352 \times 10 =$ _____	5. $100 \times 6 =$ _____	6. $18 \times 1,000 =$ _____
7. $10 \times 77 =$ _____	8. $41 \times 100 =$ _____	9. $360 \times 1,000 =$ _____
10. $85 \times 10 =$ _____	11. $506 \times 100 =$ _____	12. $1,000 \times 26 =$ _____
13. $3,150 \times 10 =$ _____	14. $100 \times 81 =$ _____	15. $11 \times 1,000 =$ _____
16. $709 \times 10 =$ _____	17. $600 \times 100 =$ _____	18. $1,000 \times 53 =$ _____
19. $10 \times 820 =$ _____	20. $13 \times 100 =$ _____	21. $39 \times 1,000 =$ _____
22. $950 \times 10 =$ _____	23. $702 \times 100 =$ _____	24. $67 \times 1,000 =$ _____

Write $>$, $<$, or $=$ in each circle.

25. 28×100 ○ 280×10

28. $1,000 \times 15$ ○ 150×100

26. $6 \times 1,000$ ○ 59×100

29. 508×100 ○ $58 \times 1,000$

27. 302×10 ○ 34×100

30. $2,100 \times 10$ ○ $20 \times 1,000$

Times 10, 100 and 1,000

Find the missing numbers. Then check the answers.

Write the missing number.

Example

$45 \times 100 = 4,500$

1. $27 \times \underline{\hspace{2cm}} = 27,000$

2. $800 = 8 \times \underline{\hspace{2cm}}$

3. $72 \times \underline{\hspace{2cm}} = 720$

4. $\underline{\hspace{2cm}} \times 1,000 = 52,000$

5. $10 \times \underline{\hspace{2cm}} = 3,700$

6. $4,060 = \underline{\hspace{2cm}} \times 10$

7. $100 \times \underline{\hspace{2cm}} = 80,000$

Is it right? Circle Right or Wrong. Then write the product.

Example

Ava wrote:

$40 \times 1,000 = 4,000$

Right

Wrong

The product is 40,000

8. Leo wrote:

$30 \times 100 = 300$

Right

Wrong

The product is

9. Mia wrote:

$100 \times 56 = 5,600$

Right

Wrong

The product is

10. Sam wrote:

$205 \times 10 = 2,500$

Right

Wrong

The product is

Circle each product that equals the number in the box.

11. 1,800 18×100 18×10 180×10 180×100

12. 50,000 500×100 $5,000 \times 100$ 500×10 $50 \times 1,000$

Times 10, 100 and 1,000

Write an equation for each story. Then solve it.

Remember

1 meter = 100 centimeters

1 kilogram = 1,000 grams

1 kilometer = 1,000 meters

1 liter = 1,000 milliliters

Write an equation. Then solve.

Example

A garden path is 15 meters long. How many centimeters long is it?

Equation: $15 \times 100 = 1,500$

Answer: 1,500 centimeters

1. Nora rides her bike 14 kilometers to the lake. How many meters does she ride?

Equation: _____

Answer: _____ meters

2. A bag of rice has a mass of 25 kilograms. What is its mass in grams?

Equation: _____

Answer: _____ grams

3. A fish tank holds 48 liters of water. How many milliliters of water does it hold?

Equation: _____

Answer: _____ milliliters

4. Omar has 29 \$10 bills. How many dollars does he have?

Equation: _____

Answer: _____ dollars

5. Ms. Lee pays for a used car with 84 \$100 bills. How many dollars does the car cost?

Equation: _____

Answer: _____ dollars

Times 10, 100 and 1,000

Every digit moves one place to the left for each 10.

Multiply. Write each digit in its new place. Draw arrows to show the moves.

	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
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× 100						
= 3,200			3	2	0	0
1. 485				4	8	5
× 10						
=						
2. 607				6	0	7
× 1,000						
=						
3. 93					9	3
× 100						
=						

Fill in the missing number.

4. 80 is 10 times
as much as _____

5. _____ is 100 times
as much as 35
6. 3,000 is _____ times
as much as 3

7. 4,700 is 10 times
as much as _____
8. In 4,400, the first 4 is worth
_____ times the second 4.

9. In 7,007, the first 7 is worth
_____ times the second 7.

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Count every zero, even the ones already in the number.

Multiply by 10, 100 and 1,000. Look at the pattern.

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Times 10, 100 and 1,000

Multiply. Then compare the products.

Example

1,000 × 64 is **64 × 1,000**: each digit moves three places to the left.

6 tens become **6** ten thousands, and **4** ones become **4** thousands: **64,000**.

Multiply. Count how many places each digit moves.

1. $23 \times 10 =$ _____	2. $9 \times 100 =$ _____	3. $1,000 \times 4 =$ _____
4. $352 \times 10 =$ _____	5. $100 \times 6 =$ _____	6. $18 \times 1,000 =$ _____
7. $10 \times 77 =$ _____	8. $41 \times 100 =$ _____	9. $360 \times 1,000 =$ _____
10. $85 \times 10 =$ _____	11. $506 \times 100 =$ _____	12. $1,000 \times 26 =$ _____
13. $3,150 \times 10 =$ _____	14. $100 \times 81 =$ _____	15. $11 \times 1,000 =$ _____
16. $709 \times 10 =$ _____	17. $600 \times 100 =$ _____	18. $1,000 \times 53 =$ _____
19. $10 \times 820 =$ _____	20. $13 \times 100 =$ _____	21. $39 \times 1,000 =$ _____
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Write >, <, or = in each circle.

25. 28×100 ○ 280×10

26. $6 \times 1,000$ ○ 59×100

27. 302×10 ○ 34×100

28. $1,000 \times 15$ ○ 150×100

29. 508×100 ○ $58 \times 1,000$

30. $2,100 \times 10$ ○ $20 \times 1,000$

Times 10, 100 and 1,000

Find the missing numbers. Then check the answers.

Write the missing number.

Example

$$45 \times 100 = 4,500$$

1. $27 \times \underline{\hspace{2cm}} = 27,000$

2. $800 = 8 \times \underline{\hspace{2cm}}$

3. $72 \times \underline{\hspace{2cm}} = 720$

4. $\underline{\hspace{2cm}} \times 1,000 = 52,000$

5. $10 \times \underline{\hspace{2cm}} = 3,700$

6. $4,060 = \underline{\hspace{2cm}} \times 10$

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Right

Wrong

The product is 40,000

8. Leo wrote:

$$30 \times 100 = 300$$

Right

Wrong

The product is

9. Mia wrote:

$$100 \times 56 = 5,600$$

Right

Wrong

The product is

10. Sam wrote:

$$205 \times 10 = 2,500$$

Right

Wrong

The product is

Circle each product that equals the number in the box.

11. 1,800

18×100

18×10

180×10

180×100

12. 50,000

500×100

$5,000 \times 100$

500×10

$50 \times 1,000$

Times 10, 100 and 1,000

Write an equation for each story. Then solve it.

Remember

1 meter = 100 centimeters

1 kilogram = 1,000 grams

1 kilometer = 1,000 meters

1 liter = 1,000 milliliters

Write an equation. Then solve.

Example

A garden path is 15 meters long. How many centimeters long is it?

Equation: $15 \times 100 = 1,500$

Answer: 1,500 centimeters

1. Nora rides her bike 14 kilometers to the lake. How many meters does she ride?

Equation: _____

Answer: _____ meters

2. A bag of rice has a mass of 25 kilograms. What is its mass in grams?

Equation: _____

Answer: _____ grams

3. A fish tank holds 48 liters of water. How many milliliters of water does it hold?

Equation: _____

Answer: _____ milliliters

4. Omar has 29 \$10 bills. How many dollars does he have?

Equation: _____

Answer: _____ dollars

5. Ms. Lee pays for a used car with 84 \$100 bills. How many dollars does the car cost?

Equation: _____

Answer: _____ dollars

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Every digit moves one place to the left for each 10.

Multiply. Write each digit in its new place. Draw arrows to show the moves.

	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
Example 32					3	2
$\times 100$						
= <u>3,200</u>			3	2	0	0
1. 485				4	8	5
$\times 10$						
= <u>4,850</u>			4	8	5	0
2. 607				6	0	7
$\times 1,000$						
= <u>607,000</u>	6	0	7	0	0	0
3. 93					9	3
$\times 100$						
= <u>9,300</u>			9	3	0	0

Fill in the missing number.

4. 80 is 10 times

as much as 8

5. 3,500 is 100 times

as much as 35

6. 3,000 is 1,000 times

as much as 3

7. 4,700 is 10 times

as much as 470

8. In 4,400, the first 4 is worth

10 times the second 4.

9. In 7,007, the first 7 is worth

1,000 times the second 7.

Times 10, 100 and 1,000

Count every zero, even the ones already in the number.

Multiply by 10, 100 and 1,000. Look at the pattern.

Example Start with 46.

$$\begin{aligned} 46 \times 10 &= \underline{460} \\ 46 \times 100 &= \underline{4,600} \\ 46 \times 1,000 &= \underline{46,000} \end{aligned}$$

1. Start with 70.

$$\begin{aligned} 70 \times 10 &= \underline{700} \\ 70 \times 100 &= \underline{7,000} \\ 70 \times 1,000 &= \underline{70,000} \end{aligned}$$

2. Start with 125.

$$\begin{aligned} 125 \times 10 &= \underline{1,250} \\ 125 \times 100 &= \underline{12,500} \\ 125 \times 1,000 &= \underline{125,000} \end{aligned}$$

3. Start with 203.

$$\begin{aligned} 203 \times 10 &= \underline{2,030} \\ 203 \times 100 &= \underline{20,300} \\ 203 \times 1,000 &= \underline{203,000} \end{aligned}$$

Count the zeros at the end of both numbers. Then multiply.

Multiply	Zeros at the end	Product
Example 50×100	$\underline{1} + \underline{2} = \underline{3}$	$\underline{5,000}$
4. 400×10	$\underline{2} + \underline{1} = \underline{3}$	$\underline{4,000}$
5. $30 \times 1,000$	$\underline{1} + \underline{3} = \underline{4}$	$\underline{30,000}$
6. 610×100	$\underline{1} + \underline{2} = \underline{3}$	$\underline{61,000}$

Times 100 is times 10, then times 10 again.

Example $38 \times 100 = 38 \times 10 \times 10 = \underline{380} \times 10 = \underline{3,800}$

7. $57 \times 100 = 57 \times 10 \times 10 = \underline{570} \times 10 = \underline{5,700}$

8. $240 \times 100 = 240 \times 10 \times 10 = \underline{2,400} \times 10 = \underline{24,000}$

Times 10, 100 and 1,000

Multiply. Then compare the products.

Example

$1,000 \times 64$ is $64 \times 1,000$: each digit moves three places to the left.

6 tens become 6 ten thousands, and 4 ones become 4 thousands: **64,000**.

Multiply. Count how many places each digit moves.

1. $23 \times 10 =$ <u>230</u>	2. $9 \times 100 =$ <u>900</u>	3. $1,000 \times 4 =$ <u>4,000</u>
4. $352 \times 10 =$ <u>3,520</u>	5. $100 \times 6 =$ <u>600</u>	6. $18 \times 1,000 =$ <u>18,000</u>
7. $10 \times 77 =$ <u>770</u>	8. $41 \times 100 =$ <u>4,100</u>	9. $360 \times 1,000 =$ <u>360,000</u>
10. $85 \times 10 =$ <u>850</u>	11. $506 \times 100 =$ <u>50,600</u>	12. $1,000 \times 26 =$ <u>26,000</u>
13. $3,150 \times 10 =$ <u>31,500</u>	14. $100 \times 81 =$ <u>8,100</u>	15. $11 \times 1,000 =$ <u>11,000</u>
16. $709 \times 10 =$ <u>7,090</u>	17. $600 \times 100 =$ <u>60,000</u>	18. $1,000 \times 53 =$ <u>53,000</u>
19. $10 \times 820 =$ <u>8,200</u>	20. $13 \times 100 =$ <u>1,300</u>	21. $39 \times 1,000 =$ <u>39,000</u>
22. $950 \times 10 =$ <u>9,500</u>	23. $702 \times 100 =$ <u>70,200</u>	24. $67 \times 1,000 =$ <u>67,000</u>

Write $>$, $<$, or $=$ in each circle.

25. 28×100 $\textcircled{=}$ 280×10

26. $6 \times 1,000$ $\textcircled{>}$ 59×100

27. 302×10 $\textcircled{<}$ 34×100

28. $1,000 \times 15$ $\textcircled{=}$ 150×100

29. 508×100 $\textcircled{<}$ $58 \times 1,000$

30. $2,100 \times 10$ $\textcircled{>}$ $20 \times 1,000$

Times 10, 100 and 1,000

Find the missing numbers. Then check the answers.

Write the missing number.

Example

$$\underline{45} \times 100 = 4,500$$

$$1. \quad 27 \times \underline{1,000} = 27,000$$

$$2. \quad 800 = 8 \times \underline{100}$$

$$3. \quad 72 \times \underline{10} = 720$$

$$4. \quad \underline{52} \times 1,000 = 52,000$$

$$5. \quad 10 \times \underline{370} = 3,700$$

$$6. \quad 4,060 = \underline{406} \times 10$$

$$7. \quad 100 \times \underline{800} = 80,000$$

Is it right? Circle Right or Wrong. Then write the product.

Example

Ava wrote:

$$40 \times 1,000 = 4,000$$

Right

Wrong

The product is 40,000

8. Leo wrote:

$$30 \times 100 = 300$$

Right

Wrong

The product is 3,000

9. Mia wrote:

$$100 \times 56 = 5,600$$

Right

Wrong

The product is 5,600

10. Sam wrote:

$$205 \times 10 = 2,500$$

Right

Wrong

The product is 2,050

Circle each product that equals the number in the box.

$$11. \quad \boxed{1,800}$$

$$\boxed{18 \times 100}$$

$$18 \times 10$$

$$\boxed{180 \times 10}$$

$$180 \times 100$$

$$12. \quad \boxed{50,000}$$

$$\boxed{500 \times 100}$$

$$5,000 \times 100$$

$$500 \times 10$$

$$\boxed{50 \times 1,000}$$

Times 10, 100 and 1,000

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Answer: 1,500 centimeters

1. Nora rides her bike 14 kilometers to the lake. How many meters does she ride?

Equation: $14 \times 1,000 = 14,000$

Answer: 14,000 meters

2. A bag of rice has a mass of 25 kilograms. What is its mass in grams?

Equation: $25 \times 1,000 = 25,000$

Answer: 25,000 grams

3. A fish tank holds 48 liters of water. How many milliliters of water does it hold?

Equation: $48 \times 1,000 = 48,000$

Answer: 48,000 milliliters

4. Omar has 29 \$10 bills. How many dollars does he have?

Equation: $29 \times 10 = 290$

Answer: 290 dollars

5. Ms. Lee pays for a used car with 84 \$100 bills. How many dollars does the car cost?

Equation: $84 \times 100 = 8,400$

Answer: 8,400 dollars