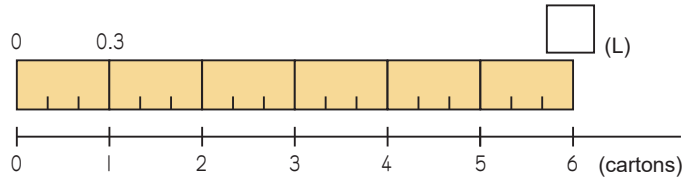


# 13-1

## Decimal Numbers-2

### Multiplication of Decimal Numbers (1)

**Example** I have 6 cartons of juice. Each carton holds 0.3 L. How many L of juice do I have in total?



According to the above diagram, we can make the math sentence  $0.3 \times 6$ . This multiplication problem can be solved in the following way.

$$\begin{array}{r}
 0.3 \times 6 = \boxed{1.8} \\
 \downarrow 10 \text{ times} \\
 3 \times 6 = 18
 \end{array}$$

$\frac{1}{10}$

When the multiplicand is multiplied by 10, the product becomes 10 times of the original product. Therefore, the original product must be  $\frac{1}{10}$ .

Math sentence

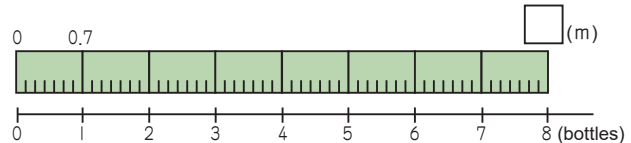
$$0.3 \times 6 = 1.8$$

Answer

1.8 L

**1** I have 8 bottles of tea. Each bottle holds 0.7 L. How many L of tea do I have in total?

Math sentence



Answer

**2** There are 7 ribbons. Each ribbon is 0.5 m long. How many m of ribbon are there in total?

Math sentence

Answer

**3** Calculate the following multiplication problems.

**1**  $0.3 \times 5 = \square$

**2**  $0.4 \times 4 = \square$

**3**  $0.5 \times 6 = \square$

**4**  $0.6 \times 2 = \square$

**5**  $0.7 \times 6 = \square$

**6**  $0.8 \times 3 = \square$

**7**  $0.9 \times 7 = \square$

**8**  $0.2 \times 8 = \square$

**9**  $0.1 \times 9 = \square$

# 13 - 2

## Decimal Numbers-2

### Multiplication of Decimal Numbers (2)

**Example** Calculate  $3.6 \times 7$  by using the multiplication algorithm.

		3	.	6
×				7
<hr/>				



		3	.	6
×				7
<hr/>				
	2	5		2



		3	.	6
×				7
<hr/>				
	2	5	.	2

When multiplying one decimal number by a whole number, disregard the decimal point. Line up the last digits of both numbers to the right.

Multiply exactly the same as if they were two whole numbers.

Write the decimal point for the product directly beneath the decimal point in the top number (the multiplicand)

Calculate the following by using the multiplication algorithm.

1  $3.8 \times 4$

		3	.	8
×				4
<hr/>				

2  $4.6 \times 7$

		4	.	6
×				7
<hr/>				

3  $5.2 \times 4$

<hr/>				

4  $7.3 \times 5$

5  $8.7 \times 6$

6  $12.3 \times 4$

7  $15.6 \times 3$

8  $27.8 \times 2$

9  $3.52 \times 8$

10  $21.4 \times 6$

11  $34.5 \times 5$

12  $48.7 \times 6$

4		5		6		7		8	
9		10		11		12			

# 13 - 3

## Decimal Numbers-2

### Multiplication of Decimal Numbers (3)

**Example** Calculate  $2.7 \times 32$  by using the multiplication algorithm.

		2	.	7
×		3	2	
-----				
+				
-----				

When multiplying one decimal number by a whole number, disregard the decimal point. Line up the last digits of both numbers to the right.

		2	.	7
×		3	2	
-----				
		5	4	
+	8	1		
-----				

Calculate as if we were multiplying two whole numbers.

2.7	→ 27 0.1's	2.7	
×	32	×	32
-----		-----	
54		54	
		81	
		-----	
		864	

		2	.	7	
×		3	2		
-----					
		5	4		
+	8	1			
-----					
		8	6	.	4

Do the addition. Then write the decimal point for the product directly beneath the decimal point in the top number (the multiplicand)

Calculate the following by using the multiplication algorithm.

1  $2.6 \times 12$

		2	.	6
×		1	2	
-----				
+				
-----				

2  $5.3 \times 14$

		5	.	3
×		1	4	
-----				
+				
-----				

3  $1.7 \times 46$

×				
-----				
+				
-----				

4  $3.8 \times 23$

5  $4.2 \times 18$

6  $5.1 \times 19$

7  $4.8 \times 29$

8  $8.6 \times 69$

9  $5.9 \times 48$

10  $3.6 \times 76$

11  $6.2 \times 57$

12  $7.5 \times 83$

4		5		6		7		8	
9		10		11		12			

# 13-4

## Decimal Numbers-2

### Multiplication of Decimal Numbers (4)

**Example** Calculate  $2.34 \times 71$  by using the multiplication algorithm.

			2	3	4
×				7	1
+					

➔

			2	3	4
×				7	1
			2	3	4
+	1	6	3	8	

➔

			2	3	4
×				7	1
			2	3	4
+	1	6	3	8	
	1	6	6	1	4

When multiplying one decimal number by a whole number, disregard the decimal point. Line up the last digits of both numbers to the right.

Calculate as if we were multiplying two whole numbers.

Do the addition. Then write the decimal point for the product directly beneath the decimal point in the top number (the multiplicand)

Calculate the following by using the multiplication algorithm.

1  $2.57 \times 62$

			2	5	7
×				6	2
+					

2  $8.41 \times 19$

			8	4	1
×				1	9
+					

3  $2.06 \times 73$

×					
+					

4  $1.86 \times 84$

5  $7.36 \times 67$

6  $8.59 \times 39$

7  $3.45 \times 63$

8  $4.56 \times 58$

9  $5.35 \times 43$

10  $6.37 \times 76$

11  $1.97 \times 98$

12  $2.86 \times 79$

4		5		6		7		8	
9		10		11		12			

# 13 - 5

## Decimal Numbers-2

### Multiplication of Decimal Numbers (5)

**Example** Calculate  $1.35 \times 4$  by using the multiplication algorithm.

	1	.	3	5
×				4
<hr/>				



	1	.	3	5
×				4
<hr/>				
	5		4	0



	1	.	3	5
×				4
<hr/>				
	5	.	4	<del>0</del>

Line up the last digits in both numbers to the right.

Calculate as if we were multiplying two whole numbers.

Write the decimal point for the product directly beneath the decimal point in the top number (the multiplicand). Since 5.40 and 5.4 are the same, we cross out 0.



We can cross out "0" in the end of the number in the decimal places.

Calculate the following by using the multiplication algorithm.

1  $1.35 \times 6$

	1	.	3	5
×				6
<hr/>				

2  $2.75 \times 2$

	2	.	7	5
×				2
<hr/>				

3  $1.85 \times 4$

×				
<hr/>				

4  $0.15 \times 4$

5  $1.26 \times 5$

6  $3.95 \times 2$

7  $2.46 \times 5$

8  $1.85 \times 8$

9  $4.36 \times 5$

10  $1.42 \times 5$

11  $1.25 \times 4$

12  $1.25 \times 8$

4		5		6		7		8	
9		10		11		12			

# 13 - 6

## Decimal Numbers-2

### Multiplication of Decimal Numbers (6)

**Example** Calculate  $0.348 \times 27$  by using the multiplication algorithm.

	0.	3	4	8
×			2	7
<hr/>				
+				
<hr/>				



	0.	3	4	8
×			2	7
<hr/>				
	2	4	3	6
+	6	9	6	
<hr/>				



	0.	3	4	8
×			2	7
<hr/>				
	2	4	3	6
+	6	9	6	
<hr/>				
	9.	3	9	6

Line up the last digits in both numbers to the right.

Calculate as if we were multiplying two whole numbers.

Write the decimal point for the product directly beneath the decimal point in the top number (the multiplicand).

Calculate the following by using the multiplication algorithm.

1  $0.237 \times 36$

	0.	2	3	7
×			3	6
<hr/>				
+				
<hr/>				

2  $0.148 \times 19$

	0.	1	4	8
×			1	9
<hr/>				
+				
<hr/>				

3  $0.307 \times 28$

×				
<hr/>				
+				
<hr/>				

4  $0.455 \times 15$

5  $0.528 \times 17$

6  $0.296 \times 32$

7  $1.562 \times 16$

8  $0.826 \times 76$

9  $1.746 \times 28$

10  $2.468 \times 34$

11  $3.085 \times 25$

12  $4.872 \times 18$

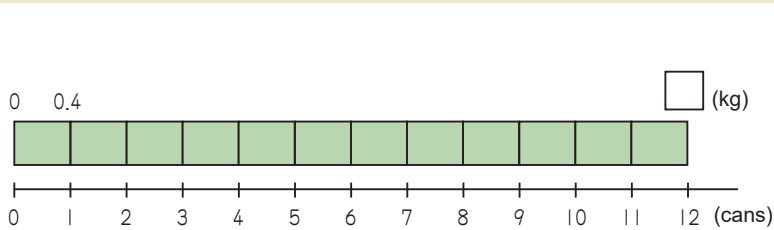
4		5		6		7		8	
9		10		11		12			

# 13 - 7

## Decimal Numbers-2

### Multiplication Problems

**Example** There are 12 cans of juice. Each can weighs 0.4 kg. What is the total weight in kg?



There are 12 cans.  
Each can weighs 0.4 kg.  
So, the math sentence  
is  $0.4 \times 12$ .



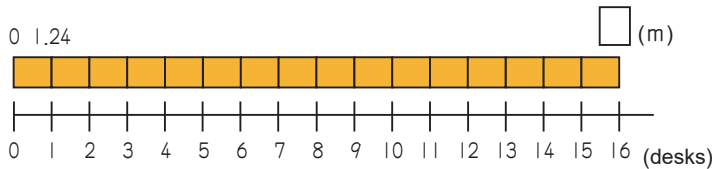
Math sentence

$$0.4 \times 12 = 4.8$$

Answer 4.8 kg

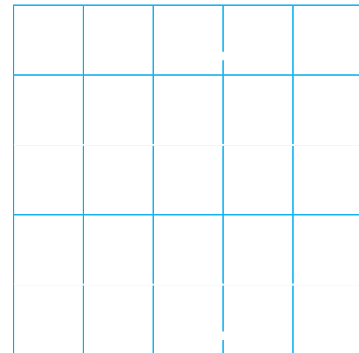
	0	.	4
×	1	2	
		8	
+	4		
	4	.	8

**1** There are some long desks. The length of the desk is 1.24 m. If we connect 16 desks, how many m will it be from end to end?



Math sentence

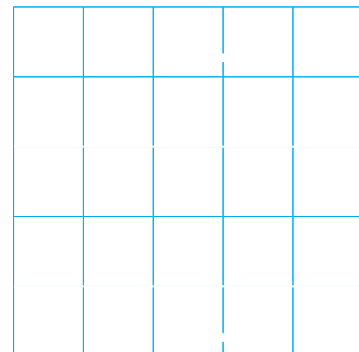
Answer \_\_\_\_\_



**2** There are 23 empty water bottles. If we put 0.55 L of water in each bottle, how many L of water will we need in total?

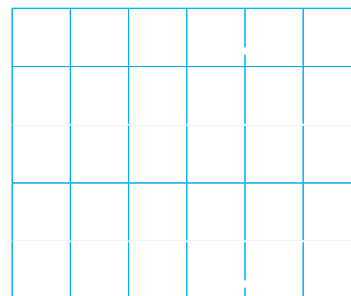
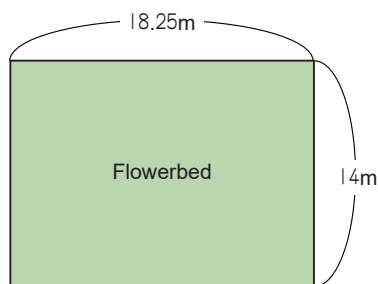
Math sentence

Answer \_\_\_\_\_



**3** A rectangular flower bed is 18.25 m long and 14 m wide. How many  $m^2$  is the flower bed?

Math sentence



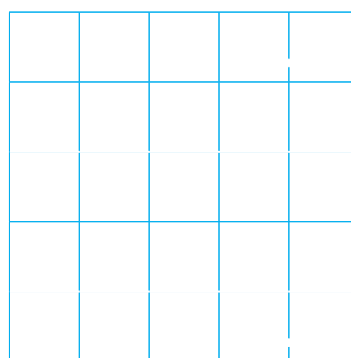
Answer \_\_\_\_\_

**4** A gardener waters her flowerbed with 11.4 L twice a day. How much water does the gardener need in one week?

Math sentence



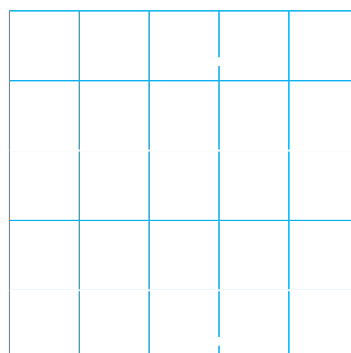
There are 7 days in a week. So, the gardener will water her flowerbed 14 times a week (2 times  $\times$  7 days = 14 times.)



Answer \_\_\_\_\_

**5** My class collected 2.56 kg of empty cans cleaning our neighborhood. The entire school collected 25 times that amount. How many kg did the entire school collect?

Math sentence



Answer \_\_\_\_\_



**1** Calculate the following.

**1**  $5.3 \times 4$


**2**  $6.7 \times 8$


**3**  $1.35 \times 5$


**4**  $2.4 \times 34$

**5**  $6.25 \times 47$

**6**  $7.49 \times 45$

**7**  $4.86 \times 53$

**8**  $5.43 \times 69$

**9**  $8.76 \times 54$

**10**  $2.176 \times 18$

**11**  $0.925 \times 83$

**12**  $1.692 \times 46$

<b>4</b>		<b>5</b>		<b>6</b>		<b>7</b>		<b>8</b>	
<b>9</b>		<b>10</b>		<b>11</b>		<b>12</b>			

**2** The length of a bridge is 34 times longer than a 1.55 m measuring stick. How long is the bridge?

Math sentence


Answer \_\_\_\_\_

**3** There are 28 canned fruits, each of which weighs 0.385 kg. What is the total weight?

Math sentence

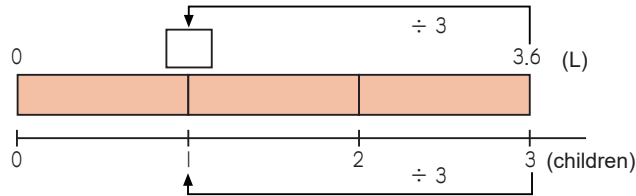

Answer \_\_\_\_\_

# 13-9

## Decimal Numbers-2

### Division of Decimal Numbers (I)

**Example** We bought 3.6 L of tea. If we share this tea equally among 3 children, how much tea will each child get?



According to the above diagram, we can make a math sentence of  $3.6 \div 3$ . This division problem can be solved in the following way.

$$3.6 \div 3 = 1.2$$

↓ 10 times

$$36 \div 3 = 12$$

←  $\frac{1}{10}$

When the dividend is multiplied by 10, the quotient becomes 10 times of the original quotient. Therefore, the original quotient must be  $\frac{1}{10}$ .

Math sentence

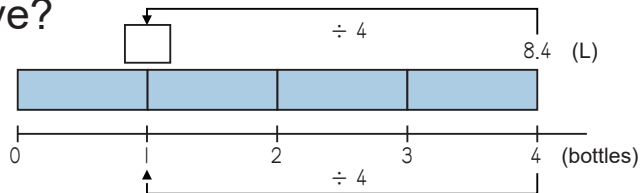
$$3.6 \div 3 = 1.2$$

Answer

1.2 L

**1** 8.4 L of tomato juice is separated equally into 4 bottles. How many L does each bottle have?

Math sentence



Answer

**2** A 9.6 m ribbon is cut into 3 equal pieces. How long is each piece?

Math sentence

Answer

**3** Calculate the following division problems.

**1**  $4.8 \div 4 = \square$

**2**  $3.3 \div 3 = \square$

**3**  $6.8 \div 2 = \square$

**4**  $9.6 \div 3 = \square$

**5**  $8.2 \div 2 = \square$

**6**  $6.9 \div 3 = \square$

# 13-10

## Decimal Numbers-2

### Division of Decimal Numbers (2)

**Example** Calculate  $7.2 \div 3$  by using the division algorithm.

	2	
3	)	7.2
-	6	
	1	

Divide 7 in the tens place by 3.

Write the quotient, 2 in the ones place.

**Multiply** 3 by 2.

**Subtract** 6 from 7.

	2	
3	)	7.2
-	6	
	1	

**Write the decimal point** directly above 2 from the tenths the decimal point of place. **Bring down** the dividend.



12 means there are twelve 0.1's.

	2.	
3	)	7.2
-	6	
	1	2

	2.	4
3	)	7.2
-	6	
	1	2
-	1	2
		0

Divide 12 by 3.

Write the quotient, 4 in the tenths place.

**Multiply** 3 by 4.

**Subtract** 12 from 12.

Calculate the following by using the division algorithm.

1  $7.8 \div 3$

3	)	7.8
-		
-		

2  $8.4 \div 7$

7	)	8.4
-		
-		

3  $9.6 \div 4$

	)	

4  $5.1 \div 3$

	)	

5  $8.4 \div 6$

5	
9	

6  $9.2 \div 4$

6	
10	

7  $8.5 \div 5$

7	
11	

8  $9.6 \div 8$

8	
12	

9  $6.4 \div 4$

9	

10  $7.6 \div 2$

10	

11  $9.8 \div 7$

11	

12  $6.5 \div 5$

12	

# 13 - 11

## Decimal Numbers-2

### Division of Decimal Numbers (3)

**Example** Calculate  $13.6 \div 4$  by using the division algorithm.

		2	
6	)	13.2	
-		12	
		1	

→

		2	.
6	)	13.2	
-		12	
		1	

→

		2.	
6	)	13.2	
-		12	
		1	2

→

		2.2	
6	)	13.2	
-		12	
		1	2
		-	12
			0

Divide 13 by 3.  
**Write** the quotient, 2 in the ones place.  
**Multiply** 6 by 2.  
**Subtract** 12 from 13.

**Write the decimal point** directly above from the tenths the decimal point of place.  
**Bring down** the 2 the dividend.



12 means there are twelve 0.1's.

Divide 12 by 6.  
**Write** the quotient, 2, in the tenths place.  
**Multiply** 6 by 2.  
**Subtract** 12 from 12.

Calculate the following by using the division algorithm.

- 1  $15.4 \div 7$       2  $23.5 \div 5$       3  $11.4 \div 6$       4  $27.2 \div 4$

7	)	15.4	
-			
-			

5	)	23.5	
-			
-			

	)		

	)		

- 5  $68.8 \div 8$       6  $19.8 \div 9$       7  $26.1 \div 3$       8  $19.2 \div 2$   
 9  $15.6 \div 6$       10  $23.6 \div 4$       11  $51.1 \div 7$       12  $32.8 \div 8$

5	6	7	8
9	10	11	12

# 13 - 12

## Decimal Numbers-2

### Division of Decimal Numbers (4)

**Example** Calculate  $5.4 \div 6$  by using the division algorithm.

	0	
6	)	5.4

Divide 5 by 6.  
Since  $5 \div 6 = 0 \text{ R } 5$ ,  
**write** a 0 in the  
ones place.

When the quotient with 0 in the  
ones place, we must write a 0.



Don't do the calculation of  $54 \div 6$   
first.

	0	.	
6	)	5	.4

**Write the decimal point**  
directly above the decimal  
point of the dividend.

	0	.	9
6	)	5	.4
-	5		4
			0

Divide 54 by 6.  
**Write** the quotient, 9, in  
the tenths place.  
**Multiply** 6 by 9.  
**Subtract** 54 from 54.

54 means there are fifty-four 0.1's.



Calculate the following by using the division algorithm.

1  $3.6 \div 9$

9	)	3.6
-		

2  $4.8 \div 8$

8	)	4.8
-		

3  $3.2 \div 4$

	)	

4  $1.2 \div 3$

	)	

5  $4.5 \div 5$

6  $3.6 \div 6$

7  $1.8 \div 2$

8  $2.4 \div 3$

9  $4.2 \div 7$

10  $6.3 \div 9$

11  $7.2 \div 8$

12  $1.6 \div 4$

5		6		7		8	
9		10		11		12	

# 13 - 13

## Decimal Numbers-2

### Division of Decimal Numbers (5)

**Example** Calculate  $78.2 \div 23$  by using the division algorithm.

			3	
2	3	)	7	8.2
		-	6	9
				9

Divide 78 by 23.  
Write the quotient, 3 in the ones place.  
Multiply 23 by 3.  
Subtract 69 from 78.

			3.	
2	3	)	7	8.2
		-	6	9
				9

Write the decimal point directly above the decimal point of the dividend.

			3.		
2	3	)	7	8.2	
		-	6	9	
				9	2

Bring down the 2 from the tenths place.

			3.	4		
2	3	)	7	8.2		
		-	6	9		
				9	2	
				-	9	2
						0

Divide 92 by 23.  
Write the quotient, 4, in the tenth place.  
Multiply 23 by 4.  
Subtract 92 from 92.



92 means there are ninety-two 0.1's.

Calculate the following by using the division algorithm.

1  $86.4 \div 24$

2	4	)	8	6.4
		-		
		-		

2  $46.8 \div 18$

1	8	)	4	6.8
		-		
		-		

3  $54.4 \div 16$

		)		

4  $87.5 \div 25$

5  $99.2 \div 32$

6  $73.1 \div 43$

7  $78.2 \div 34$

8  $67.2 \div 42$

9  $41.6 \div 13$

10  $66.3 \div 51$

11  $81.6 \div 17$

12  $75.6 \div 27$

4		5		6		7		8	
9		10		11		12			

# 13-14

## Decimal Numbers-2

### Division of Decimal Numbers (6)

**Example** Calculate  $8.67 \div 3$  by using the division algorithm.

$\begin{array}{r} 2 \\ 3 \overline{)8.67} \\ - 6 \phantom{00} \\ \hline 2 \phantom{00} \end{array}$	$\begin{array}{r} 2. \\ 3 \overline{)8.67} \\ - 6 \phantom{00} \\ \hline 26 \phantom{00} \end{array}$	$\begin{array}{r} 2.8 \\ 3 \overline{)8.67} \\ - 6 \phantom{00} \\ \hline 26 \phantom{00} \\ - 24 \phantom{00} \\ \hline 27 \phantom{00} \end{array}$	$\begin{array}{r} 2.89 \\ 3 \overline{)8.67} \\ - 6 \phantom{00} \\ \hline 26 \phantom{00} \\ - 24 \phantom{00} \\ \hline 27 \phantom{00} \\ - 27 \phantom{00} \\ \hline 0 \end{array}$
---	---	---	---

Divide 8 by 3.

**Write** the quotient, 2, in the ones place.

**Multiply** 3 by 2.

**Subtract** 6 from 8.

**Write the decimal point** directly above the decimal point of the dividend.

**Bring down** the 6 from the tenths place.

**Subtract** 24 from 26.

Divide 26 by 3.

**Write** the quotient, 8 in the tenth place.

**Multiply** 3 by 8.

**Subtract** 24 from 26.

**Bring down** the 7 from the hundreds place.

Divide 27 by 3.

**Write** the quotient, 9, in the hundredth place.

**Multiply** 3 by 9.

**Subtract** 27 from 27.

24 means there are twenty-four 0.1's. 27 means there are twenty-seven 0.01's.



Calculate the following by using the division algorithm.

1  $6.52 \div 4$

4	)	6.52	
-			
-			
-			

2  $7.56 \div 7$

	)		

3  $7.59 \div 3$

2  $7.86 \div 6$

5  $5.34 \div 2$

4  $9.36 \div 4$

7  $7.95 \div 5$

6  $3.94 \div 2$

9  $7.42 \div 7$

10  $6.24 \div 3$

The problems 2, 9 and 10 are difficult. Can you solve them?



3	4	5	6
7	8	9	10

# 13 - 15

## Decimal Numbers-2

### Division of Decimal Numbers (7)

**Example** Calculate  $9.826 \div 34$  by using the division algorithm.

		0			
3	4	)	9	.	8 2 6

		0.	2		
3	4	)	9	.	8 2 6
		-	6	8	
			3	0	2

		0.	2	8		
3	4	)	9	.	8 2 6	
		-	6	8		
			3	0	2	
		-	2	7	2	
				3	0	6

		0.	2	8	9	
3	4	)	9	.	8 2 6	
		-	6	8		
			3	0	2	
		-	2	7	2	
				3	0	6
		-		3	0	6
						0



Once again, when the quotient with 0 in the ones place, we must write a 0.

Don't do the calculation of  $98 \div 34$  first.

Divide 9 by 34.

Since  $9 \div 34 = 0 \text{ R } 9$ , write 0 in the ones place.

**Write the decimal point** directly above the decimal point of the dividend.

Divide 98 by 34.

Write the quotient, 2, in the tenth place.

**Multiply** 34 by 2. **Subtract** 68 from 98. **Bring down** the 2 from the tenths place.

Divide 302 by 34.

Write the quotient, 8, in the hundredth place.

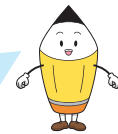
**Multiply** 34 by 8. **Subtract** 272 from 302. **Bring down** the 6 from the hundreds place.

Divide 306 by 34.

Write the quotient, 9, in the thousandth place.

**Multiply** 34 by 9. **Subtract** 306 from 306.

68 means there are sixty-eight 0.1's.  
272 means there are two hundred seventy-two 0.01's.  
306 means there are three hundred six 0.001's.



Calculate the following by using the division algorithm.

- 1  $6.399 \div 27$     2  $5.859 \div 31$     3  $5.805 \div 43$     4  $8.528 \div 52$

2	7	)	6	.	3 9 9
		-			
		-			
		-			

		)			

- 5  $8.211 \div 23$     6  $7.686 \div 61$

- 7  $7.488 \div 36$     8  $5.712 \div 56$

- 9  $3.268 \div 76$     10  $2.747 \div 41$

3		4		5		6	
7		8		9		10	



# 13-16

## Decimal Numbers-2

### Division of Decimal Numbers (8)

**Example** Calculate  $46.7 \div 3$  by using the division algorithm. Calculate the quotient to the ones place, and find the remainder.

3	)	4	6.7
-		3	

Divide 4 by 3.  
**Write** the quotient, 1, in the tens place.  
**Multiply** 3 by 1.  
**Subtract** 3 from 4.

		5	
3	)	4	6.7
-		3	
		6	
-		1	5

**Bring down** the 6 from the ones place.  
 Divide 16 by 3.  
**Write** the quotient, 5, in the ones place.  
**Multiply** 3 by 5.  
**Subtract** 15 from 16.

		5	
3	)	4	6.7
-		3	
		6	
-		1	5
			7

**Bring down** the 7 from the tenths place.  
**Write the decimal point** of the remainder. The decimal point goes in the same place as the decimal point of the dividend.

Check the answer:

$$46.7 \div 3 = 15 \text{ R } 1.7$$

$$3 \div 15 = 1.7 \text{ R } 46.7$$

$$46.7 \div 3 = 15 \text{ R } 1.7$$

Calculate the quotient to the ones place and find the remainder. Then check your answer.

**1**  $97.4 \div 7 = \square \text{ R } \square$     
 **2**  $89.5 \div 8 = \square \text{ R } \square$     
 **3**  $45.2 \div 12 = \square \text{ R } \square$     
 **4**  $74.8 \div 26 = \square \text{ R } \square$

7	)	9	7.4
-			

Check

	)		

Check

	)		

Check

	)		

Check

# 13 - 17

## Decimal Numbers-2

### Division of Decimal Numbers (9)

**Example** Continue dividing  $1.7 \div 5$  until it is divided completely.

	0		
5	)	1.7	

Divide 1 by 5.

Since  $1 \div 5 = 0$  R 1, **write** 0 in the ones place.

**Write the decimal point** directly above the decimal point of the dividend.

	0.3		
5	)	1.7	0
-	1	5	
		2	0

Divide 17 by 5.

**Write** the quotient, 3, in the tenth place.

**Multiply** 5 by 3.

**Subtract** 15 from 17.

Since 1.7 is the same as 1.70, **bring down** 0 from the hundredths place.

	0.34		
5	)	1.7	0
-	1	5	
		2	0
-		2	0
			0

Divide 20 by 5.

**Write** the quotient, 4, in the hundredth place.

**Multiply** 5 by 4.

**Subtract** 20 from 20.

When we continue dividing a division problem until it is divided completely, we can put 0's in the dividend.



Calculate the following division problems until these are divided completely.

1  $7.4 \div 5$

5	)	7.4	

2  $1.38 \div 4$

	)		

3  $1.71 \div 6$

	)		

2  $16.31 \div 35$

	)		

5  $16.47 \div 54$

7  $84.5 \div 26$

9  $9 \div 75$

6  $34.34 \div 68$

8  $36.9 \div 18$

10  $3 \div 25$

To solve the problems 9 and 10, we must put two 0's like "9.00" and "3.00" respectively.



3		4		5		6	
7		8		9		10	

# 13-18

## Decimal Numbers-2

### Rounding the Quotients

**Example** There is a ribbon that is 7 m long. If we share this ribbon equally among 3 children, how many m of ribbon can each child get? Round the answer to a tenths of a metre.

Math sentence

$$7 \div 3 = 2.3\cancel{3}$$

Answer Approximately 2.3 m



The answer is 2.66... So, we round this number to the tenths place. The answer is 2.7.

	2.3	<del>3</del>
3	)7.0	0
-	6	
	1	0
-	9	0
		1
-		9
		1

**1** There is 7.3 L of orange juice. If we share it equally among 6 people, how much juice does each person get? Round the answer to a tenth of a L.

Math sentence

Answer \_\_\_\_\_

)			

**2** Calculate the following. Round the quotient to the tenths place.

**1**  $24.3 \div 7$   
Approximately  
=

)			

**2**  $61.7 \div 43$   
Approximately  
=

)			

**3**  $95.5 \div 37$   
Approximately  
=

)			

**4**  $54.5 \div 19$   
Approximately  
=

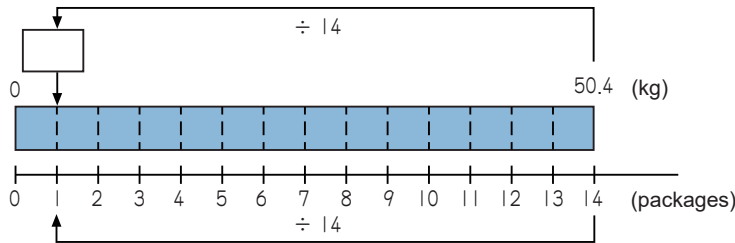
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# 13-19

## Decimal Numbers-2

### Division Problems

**Example** We have 50.4 kg of sugar. If we divide it into 14 small packages, how much will each small package weigh?



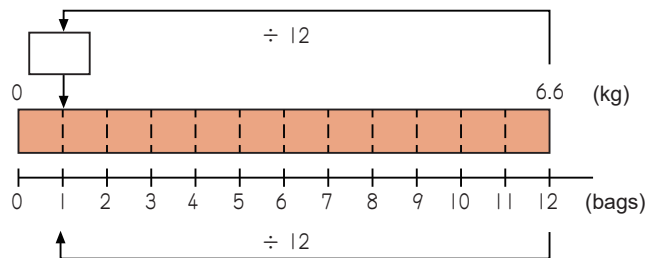
Math sentence

$$50.4 \div 14 = 3.6$$

Answer 3.6 kg

			3.6
14	)	50.4	
	-	42	
		84	
	-	84	
		0	

**1** We have 6.6 kg of rice. We divide the rice equally into 12 bags. What will the weight be of each bag of rice?



Math sentence

Answer \_\_\_\_\_

	)			

**2** We have 46.5 m of ribbon. If we cut 4 m long pieces from this ribbon, how many pieces can we get? How long is the remaining piece of ribbon?

Math sentence

Answer \_\_\_\_\_

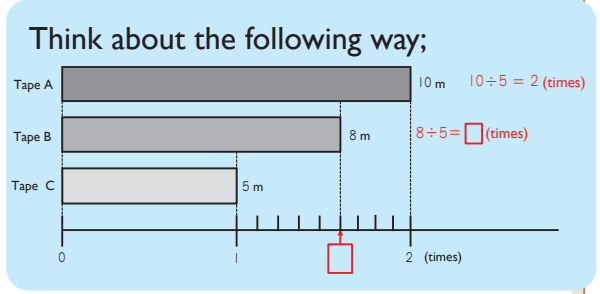
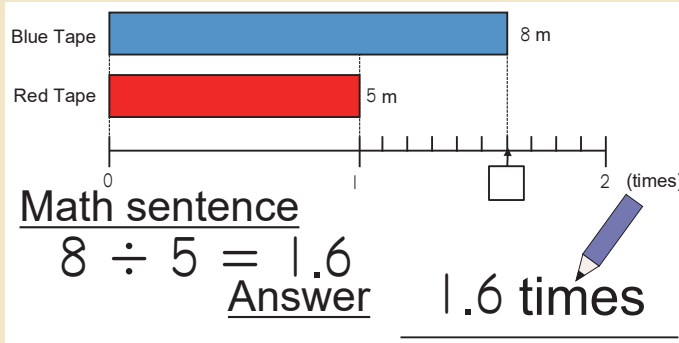
	)		

# 13-20

## Decimal Numbers-2

### Times as Many and Decimal Numbers

**Example** I have a red tape and a blue tape. The red tape is 5 m long and the blue tape is 8 m long. How many times longer is the blue tape than the red tape?



**1** I have 5 chocolates. My friend has 10 chocolates. How many times more chocolate does my friends have compared to me?

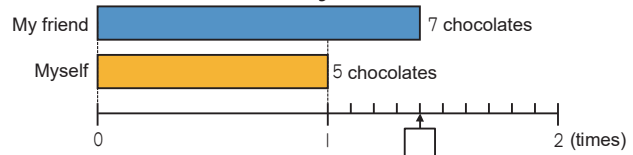
Math sentence



Answer

**2** I have 5 chocolates. Another friend of mine has 7 chocolates. How many times more chocolate does my friends have compared to me?

Math sentence



Answer

**3** I have 5 chocolates. My brother has 5 chocolates. How many times more chocolates does my friends have compared to me?

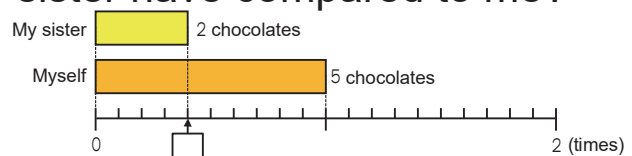
Math sentence



Answer

**4** I have 5 chocolates. My sister has 2 chocolates. How many times more chocolates does my sister have compared to me?

Math sentence



Answer

# 13 - 21

## Decimal Numbers-2

### Review (2)

**1** Calculate the following division problems by using the division algorithm.

**1**  $11.4 \div 6$

	)		

**2**  $12.8 \div 4$

	)		

**3**  $0.8 \div 4$

	)	

**4**  $7.2 \div 9$

	)	

**5**  $90.1 \div 17$

**6**  $39.9 \div 21$

**7**  $98.7 \div 47$

**8**  $89.6 \div 28$

**9**  $9.63 \div 45$

**10**  $54.99 \div 13$

**11**  $0.133 \div 7$

**12**  $1.664 \div 8$

<b>1</b>		<b>2</b>		<b>3</b>		<b>4</b>	
<b>5</b>		<b>6</b>		<b>7</b>		<b>8</b>	
<b>9</b>		<b>10</b>		<b>11</b>		<b>12</b>	

**2** There is 21.5 L of lemonade. If we share it equally among 9 children, how many L can each child get? Round the answer to the nearest tenth of a L.

Math sentence

Answer \_\_\_\_\_

**3** I bought 8 new books. My older sister bought 12 new books. How many times more books did my sister buy compared to me?

Math sentence

Answer \_\_\_\_\_

**4** I have 19.5 L of ice tea. If we share it equally among 15 people, how much ice tea does each person get?

Math sentence

Answer \_\_\_\_\_