



17課/Lesson 17/Leksyon 17

ようごとぶん / Words and phrases / Mga Salita

ようご	Words	Mga salita
どこから	from where; which first	saan magsisimula/alín ang unahin
1つにする	combine	pagsamahin
どっち	which one	alín
ほう	(which) way/one	paraan
さきに	first; ahead	una; mas nauna

ぶん	Phrases	Grupo ng mga salita
どこから かけても おなじ	The answer will be same regardless of which you multiply first.	Pareho lang ang sagot kahit alín ang unahin imultiply.
この 2つの しきを 1つにすると こうなります。	If we combine these 2 equations, it will look like this.	Kung pagsamahin natin ang 2 equations, ganito ang resulta.
どっちの ほうが かんたんでしょうか。	Which is easier?	Alín sa dalawa ang mas madaling gawin?
( ) は、ここを 「さきに けいさんした」という いみです。	( ) means, this number was calculated first.	Ibig sabihin ng ( ) ay ito ang naunang kinalkula.



## 17課/Lesson 17 /Leksyon 17

### 【内容】Contents / Mga Nilalaman

① 3つの掛け算が用いられる場面を理解する。
② 3つの掛け算は、どれを先にかけても答えは同じになることを知る。
③ ( ) を使って3つの掛け算を計算する方法を理解する。
①To understand cases where there is multiplication of 3 factors.
②To understand whichever of the 3 factors we calculate first, the answer will be the same.
③To understand the process and ways of multiplying the 3 factors by use of ( ).
①Ang pag-unawa sa kaso ng gagamit ng kalkulasyong 3 factors.
②Alamin na alin man sa 3 factors ang unahin sa pagkalkula, ang sagot ay hindi mag-iiba.
③Ang pag-unawa sa proseso ng pagmultiply ng 3 factors na ( ).

### 【日本語の表現】Math Expressions in Japanese / Mga Math Expressions sa Japanese

① 「[物]が[場所]に[数量]入っている。」という表現の複雑な言い方に慣れる。 (例) 「1個85円のケーキが1箱に4個ずつ入っています。」
① To get used to the complicated way of saying 「[MONO](thing) GA [BASHO](place) NI [SUURYOU](volume/pieces) HAITTEIRU」[There are [pieces] of [thing] at/in [place]]. Ex.「1KO 85EN NO KEEKIGA 1 HAKONI 4KO ZUTSU HAITTEIMASU」[There are 4 pieces of cake which costs 85 yen per piece in a box.]
①「[MONO] GA [BASHO] NI [SUURYOU] HAITTEIRU」[Masanay sa kumplikadong expression na may ilan 「bagay」sa「lugar/lalagyan」 "Hal. 「1KO 85EN NO KEEKIGA 1 HAKONI 4KO ZUTSU HAITTEIMASU」 [Sa isang kahon ay may 4 na pirasong cake na tig-85 yen bawat isa.]"

# 17 どこからかけてもおなじ

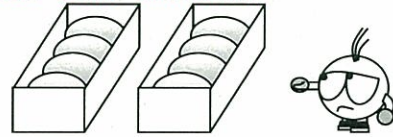
*dokokara kaketemo onaji*

1

3つの掛け算はどこから掛けても結果が同じになること（結合の法則）の理解

1はこに60えんのおかしが4こずつはっています。  
*Hitohako ni rokujuuen no okashi ga yonko zutsu haitteimasu.*

2はこでだいきんはいくらになりますか。  
*Futahako de daikin wa ikura ni narimasuka.*



## 1はこがいくらかをさきにけいさん

*hitohako ga ikuraka o saki ni keisan*

① 60えんのおかしが4つでいくらになりますか。  
*Rokujuuen no okashi ga yottsu de ikurani narimasuka.*  
 しきを かきましょう。  
*Shiki o kakimashou.*

$$\begin{array}{ccc} \boxed{\phantom{60}} & \times & \boxed{\phantom{4}} = \boxed{\phantom{ikura}} \\ \text{60えん} & & \text{4つ} \\ \text{rokujuuen} & & \text{yottsu} \end{array}$$



② 1はこ 240えんです。2はこでいくらになりますか。  
*Hitohako nihyakuyonjuuen desu. Futahako de ikura ni narimasuka.*

$$\begin{array}{ccc} \boxed{\phantom{240}} & \times & \boxed{\phantom{2}} = \boxed{\phantom{ikura}} \\ \text{240えん} & & \text{2はこ} \\ \text{nihyakuyonjuuen} & & \text{futahako} \end{array}$$

この2つのしきを1つにするとこうなります。  
*Kono futatsu no shiki o hitotsu ni suruto koonarimasu.*

$$\left( \begin{array}{ccc} \boxed{60} & \times & \boxed{4} \\ \text{60えん} & & \text{4つ} \\ \text{rokujuuen} & & \text{yottsu} \end{array} \right) \times \begin{array}{ccc} \boxed{2} & = & \boxed{480} \\ \text{2はこ} & & \text{いくら} \\ \text{futahako} & & \text{ikura} \end{array}$$

( ) は、ここを「さきにけいさんした」といういみです。  
*wa koko o saki ni keesanshita to iu imidesu.*

# 17 The answer will be same regardless of which you multiply first.

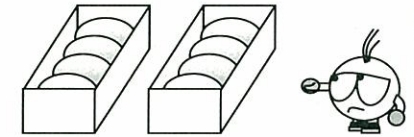
*Pareho lang ang sagot kahit alin ang unahin imultiply.*

1

3つの掛け算はどこから掛けても結果が同じになること（結合の法則）の理解

There are 4 pieces of sweets inside each box. Each piece costs 60 yen.  
*Mayroong 4 na pirasong keyk sa 1 box. Bawat isa ay tig-60 yen.*

If there are 2 boxes, how much will it cost?  
*Kung mayroong 2 box ng keyk, magkano ang presyo nito?*



## Calculate the cost of each box first.

*Kalkulahin muna natin kung magkano ang presyo ng 1 box.*

① How much is the cost of 4 pieces of sweets at 60 yen per piece? Let's write the equation.  
*Magkano ang presyo ng 4 na minatamis sa tig-60 yen bawat isa? Isulat natin ang equation.*

$$\begin{array}{ccc} \boxed{\phantom{60}} & \times & \boxed{\phantom{4}} = \boxed{\phantom{magkano?}} \\ \text{60 yen} & \times & \text{4} = \text{how much?} \\ \text{60 yen} & \times & \text{4} = \text{magkano?} \end{array}$$



② 1 box costs 240 yen. How much will 2 boxes cost?  
*Ang 1 box ay 240 yen. Magkano ang 2 box?*

$$\begin{array}{ccc} \boxed{\phantom{240}} & \times & \boxed{\phantom{2}} = \boxed{\phantom{magkano?}} \\ \text{240 yen} & \times & \text{2 boxes} = \text{how much?} \\ \text{240 yen} & \times & \text{2 box} = \text{magkano?} \end{array}$$

If we combine these 2 equations, it would look like this.  
*Kung pagsamahin natin ang 2 equation, ganito ang magiging resulta.*

$$\left( \begin{array}{ccc} \boxed{60} & \times & \boxed{4} \\ \text{60 yen} & \times & \text{4 pieces} \\ \text{60 yen} & \times & \text{4 na piraso} \end{array} \right) \times \begin{array}{ccc} \boxed{2} & = & \boxed{480} \\ \text{2 boxes} & = & \text{cost} \\ \text{2 box} & = & \text{presyo} \end{array}$$

( ) means that this was calculated first.  
*ibig sabihin ng( ) nito ay ito ang naunang kinakula.*

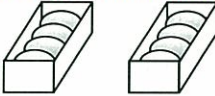
# ぜんぶでなんこ あるかを さきに けいさん

zenbu de nanko aruka o saki ni keesan

- ① 1はこに 4こ はいています。2はこで なんこ になりますか。  
 Hitohako ni yonko haitteimasu. Futahako de nanko ni narimasuka.

$$\boxed{\phantom{00}} \times \boxed{\phantom{00}} = \boxed{\phantom{00}}$$

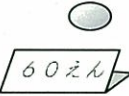
4こ yonko      2はこ futahako      いくつ ikutsu



- ② 1こ 60えんです。8こでいくら になりますか。  
 Ikko rokujuuen desu. Hakko de ikura ni narimasuka.

$$\boxed{\phantom{00}} \times \boxed{\phantom{00}} = \boxed{\phantom{00}}$$

60えん rokujuuen      8こ hakko      いくら ikura



この2つのしきを1つにするとこうなります。  
 Kono futatsu no shiki o hitotsu ni suruto koonarimasu.

$$\boxed{60} \times (\boxed{4} \times \boxed{2}) = \boxed{480}$$

60えん rokujuuen      4つ yottsu      2はこ futahako      いくら ikura

こんどは、ここを さきに  
 Kondo wa koko o saki ni  
 けいさんしたのですね。  
 keesan shitanodesune.

3つのかけざんでは、どっちを さきに けいさんしても、  
 Mittsu no kakezan dewa, docchi o saki ni keesanshitemo,

こたえは おなじです。  
 kotae wa onajidesu

$$(60 \times 4) \times 2 = 480$$

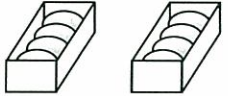
$$60 \times (4 \times 2) = 480$$

Calculate the number of sweets first...  
 Kalkulahin muna ang presyo ng 1 box...

- There are 4 pieces of sweets in 1 box. If there are 2 boxes, how many sweets are there in all?  
 ① Mayroong 4 na pirasong minatamis sa 1 box. Pag mayroong 2 box nito, ilang piraso lahat?

$$\boxed{\phantom{00}} \times \boxed{\phantom{00}} = \boxed{\phantom{00}}$$

4 pieces X 2 boxes = how many?  
 4 na piraso X 2 box = ilan lahat?



- ② 1 piece costs 60 yen. How much will 8 pieces of sweets cost?  
 Ang 1 piraso ay 60 yen. Magkano ang presyo ng 8 piraso?

$$\boxed{\phantom{00}} \times \boxed{\phantom{00}} = \boxed{\phantom{00}}$$

60 yen X 8 pieces = how much?  
 60 yen X 8 piraso = magkano?



If we combine these 2 equations, it would look like this.  
 Kung ating pagsamahin ang 2 equations, ganito ang resulta.

$$\boxed{60} \times (\boxed{4} \times \boxed{2}) = \boxed{480}$$

60 yen X (4 pieces X 2 boxes) = how much?  
 60 yen X (4 na piraso X 2 box ) = magkano?

This time, we calculated this part first.  
 Ilong equation ay naunang kinalkula.

In the case of multiple factors, we can start multiplying from any of the 3 factors and the answer will be the same.

Sa kaso ng multiple factors, maaaring magsimula ng pagkalkula sa kahit alin man sa 3 factors at ang sagot ay hindi magbabago.

$$(60 \times 4) \times 2 = 480$$

$$60 \times (4 \times 2) = 480$$

2

3つの掛け算を工夫して計算する

2つのほうほうで けいさんしてきましょう。

Futatsu no hoo hoo de keesan shitemimashoo.

どっちのほうがかんたんでしょうか。

docchino hooga kantandeshooka

(1)  $90 \times 3 \times 2$

(2)  $41 \times 5 \times 2$



(1)  $90 \times 3 \times 2$

①  $(90 \times 3) \times 2$

$90 \times 3 = \square$

$\square \times 2 = \square$

90 × 3 のこたえ

kyuujuu kakeru san no kotae

②  $90 \times (3 \times 2)$

$3 \times 2 = \square$

$90 \times \square = \square$

3 × 2 のこたえ

san kakeru ni no kotae

(2)  $41 \times 5 \times 2$

①  $(41 \times 5) \times 2$

$41 \times 5 = \square$

$\square \times 2 = \square$

41 × 5 のこたえ

yonjuuichi kakeru go no kotae

②  $41 \times (5 \times 2)$

$5 \times 2 = \square$

$41 \times \square = \square$

5 × 2 のこたえ

go kakeru ni no kotae



Para sa mga Filipino Instructors

2

3つの掛け算を工夫して計算する

Let's multiply these 3 factors in 2 ways. Which one is easier to calculate?

Subukan nating gamitin ang paraan uri ng pagkalkula. Alin ang mas maddaling gawin?

(1)  $90 \times 3 \times 2$

(2)  $41 \times 5 \times 2$



(1)  $90 \times 3 \times 2$

①  $(90 \times 3) \times 2$

$90 \times 3 = \square$

$\square \times 2 = \square$

Write the answer to 90 × 3 here.  
Dito isulat ang sagot sa 90 × 3.

②  $90 \times (3 \times 2)$

$3 \times 2 = \square$

$90 \times \square = \square$

Write the answer to 3 × 2 here.  
Dito isulat ang sagot sa 3 × 2.

(2)  $41 \times 5 \times 2$

①  $(41 \times 5) \times 2$

$41 \times 5 = \square$

$\square \times 2 = \square$

Write the answer to 41 × 5 here.  
Dito isulat ang sagot sa 41 × 5.

②  $41 \times (5 \times 2)$

$5 \times 2 = \square$

$41 \times \square = \square$

Write the answer to 5 × 2 here.  
Dito isulat ang sagot sa 5 × 2.

108

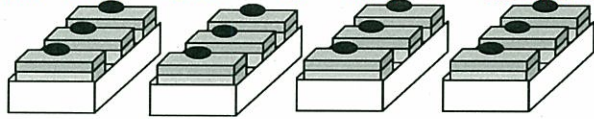
3

3つの掛け算の文章題に慣れる

1こ85えんのケーキが1はこに3こずつはっています。  
Ikko hachijuugoen no keeki ga hitohako ni sankozutsu haiteimasu.

4はこかうと、だいきんはいくらになりますか。

Yonhako kauto daikin wa ikura ni narimasuka.



① 3つのかけざんにしましょう。

Mittsu no kakezan ni shimashoo.

$$\square \times \square \times \square = \square$$

ケーキ1この値段 1はこにいくつ なんはこあるか ぜんぶでいくら  
keeki ikko no nedan hitohako ikutsu nanhako aruka zenbu de ikura

( ) のところがさきでしたね。  
no tokoro ga saki deshitane.



② (85 × 3) × 4 のけいさんをしましょう。

no keesan o shimashoo.

はじめのけいさん  
hajime no keesan

$$\square \times \square = \square$$

つぎのけいさん  
tsugi no keesan

$$\square \times \square = \square$$

③ 85 × (3 × 4) のけいさんをしましょう。

no keesan o shimashoo.

はじめのけいさん  
hajime no keesan

$$\square \times \square = \square$$

つぎのけいさん  
tsugi no keesan

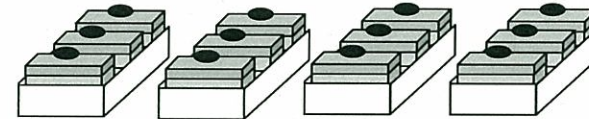
$$\square \times \square = \square$$

3

3つの掛け算の文章題に慣れる

1 piece of cake costs 85 yen. Each box of cake contains 3 pieces. If I buy 4 boxes of these, how much will it cost?

Ang 1 piraso ng keyk ay 85 yen. Bawat isang box ng keyk ay may lamang 3 piraso. Kung 4 na box ang bibilhin, magkano lahat ito?



Let's multiply these 3 factors.

① I-multiply natin ang sumusunod na 3 factors.

$$\square \times \square \times \square = \square$$

the price for 1 piece of cake X number of cakes per box X number of boxes = total price  
presyo ng 1 piraso X bilang ng keyk sa 1 box X bilang ng box = magkano lahat

We multiply those inside the ( ) first.  
Kalkulahin muna natin ang nasa loob ng ( )



② Let's multiply (85 × 3) × 4.

I-multiply natin ang (85 × 3) × 4.

First step  
Unang step

$$\square \times \square = \square$$

Next step  
Sumunod na step

$$\square \times \square = \square$$

③ Let's multiply 85 × (3 × 4).

I-multiply natin ang 85 × (3 × 4).

First step  
Unang step

$$\square \times \square = \square$$

Next step  
Sumunod na step

$$\square \times \square = \square$$