26課 / Lesson 26 / Leksyon 26

ようご と ぶん / Words and phrases / Mga Salita

ようご	Words	Mga salita
はりがね	wire	kawad / wire

26課/Lesson 26/Leksyon 26

【内容】　Contents　Mga Nilalaman

①分数÷分数の文章題
①Word problems on fraction÷fraction.
①Mga word problem sa fraction÷fraction.

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

①単位を表す「で」 →　「2/3dｌで3/5㎡塗れる。」
①「DE」, terminology to express the unit　→「2/3dl DE 3/5㎡ NURERU.」(3/5㎡ can be painted with 2/3 dl.)
①「DE」na ginagamit upang maituro ang unit / pamantayan.　→「2/3dl DE 3/5㎡ NURERU.」(Mapipintahan ang 3/5㎡ sa gamit ng 2/3dl.)

分数÷分数の計算になる「ペンキと板」の問題場面を知る。

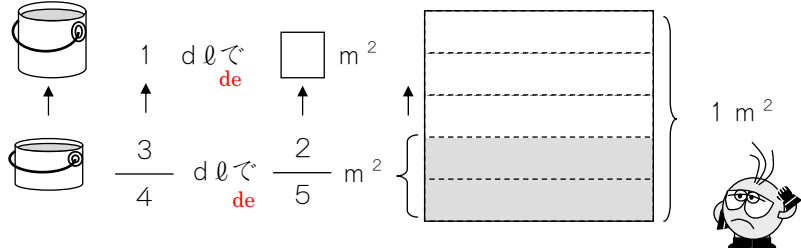**1**

$\dfrac{3}{4}$ dℓで いたを $\dfrac{2}{5}$ m² ぬれる ペンキが あります。
deshirittoru de ita o nureru penki ga arimasu

このペンキを 1 dℓつかいました。 なんm² ぬれましたか。
Kono penki o tsukaimashita Nan nuremashitaka

1 dℓで □ m²

$\dfrac{3}{4}$ dℓで $\dfrac{2}{5}$ m² } 1 m²

ペンキ Penki	$\dfrac{3}{4}$ dℓ	→ 1 dℓ
ひろさ Hirosa	$\dfrac{2}{5}$ m²	→

ペンキの りょうが ふえたので、ぬれた ひろさも ふえました。
Penki no ryoo ga fueta node nureta hirosa mo fuemashita

どれぐらい ふえたかを けいさんします。
Doregurai fuetaka o keesan shimasu

ふえた りょう Fueta ryoo	÷	もとの りょう Moto no ryoo	= なんばいに なったか Nanbai ni nattaka
1 dℓ	÷	$\dfrac{3}{4}$ dℓ	= $\dfrac{4}{3}$ ばいに なった。 bai ni natta

ぬれる ひろさも $\dfrac{4}{3}$ ばいに なるので、
Nureru hirosa mo bai ni naru node

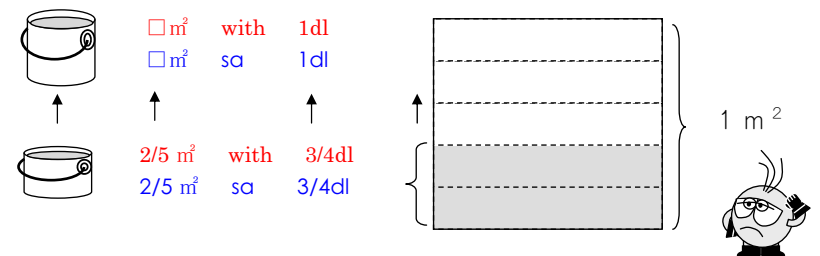$\dfrac{2}{5}$ m² × $\dfrac{4}{3}$ で $\dfrac{8}{15}$ m²に なります。
de ni narimasu

分数÷分数の計算になる「ペンキと板」の問題場面を知る。

1

There is paint, 3/4dl of which is enough to paint 2/5 m² of board.
Mayroong pintura na 3/4dl nito ay makakakulay ng 2/5 m² ng tabla.
1dl of this paint was used. How many m² was painted?
Ginamit ang 1dl ng pinturang ito. Ilang m² ang nakulayan nito?

□ m² with 1dl
□ m² sa 1dl

2/5 m² with 3/4dl
2/5 m² sa 3/4dl } 1 m²

paint pintura	$\dfrac{3}{4}$ dℓ	→ 1 dℓ
area lawak	$\dfrac{2}{5}$ m²	→

The amount of the paint increased, so the painted area also increased.
Ang dami ng pintura ay naragdagan kaya ang kasakupang nakulayan ay naragdagan din.
Calculate how much increased.
Kalkulahin kung gaano karami ang naragdagan.

| amount increased naragdagang dami	÷	original amount pinagmulang dami	= How many times of the original is it? Ilang beses ng pinagmulang dami ito?
1 dℓ	÷	$\dfrac{3}{4}$ dℓ	= $\dfrac{4}{3}$ times

The area that can be painted also becomes 4/3 times, so it becomes …
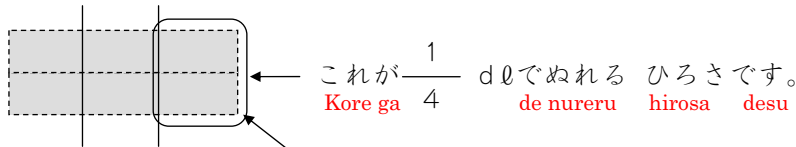Ang kasakupang makukulayan ay magiging 4/3 beses kaya magiging…

8/15 m² by calculating 2/5 m²×4/3.
8/15 m² sa pagkalkula ng 2/5 m²×4/3.

えで たしかめてみましょう。
E de tashikamete mimashoo

これは $\dfrac{3}{4}$ dℓでぬれる $\dfrac{2}{5}$ m² です。
Kore wa de nureru desu
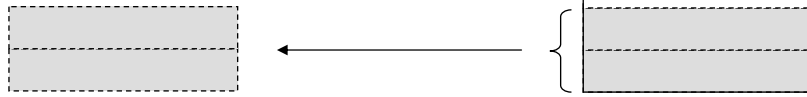
これを 3で わると、 $\dfrac{1}{4}$ dℓでぬれる ひろさが わかります。
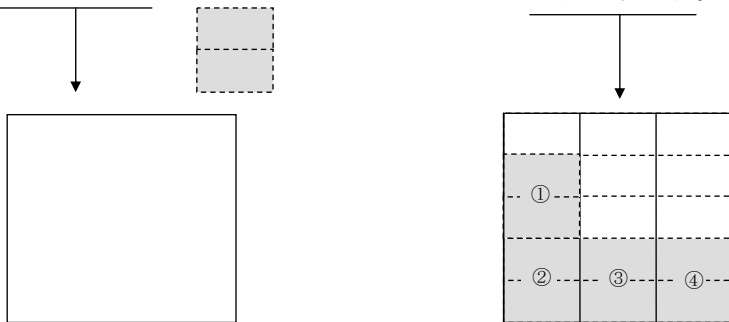Kore o de waru to de nureru hirosa ga wakarimasu

これが $\dfrac{1}{4}$ dℓでぬれる ひろさです。
Kore ga de nureru hirosa desu

1 dℓは $\dfrac{4}{4}$ dℓですから、これが４つぶんです。
wa desukara kore ga yottsu bun desu

1 m²の いたに これを ４つぶん ぬると こうなります。
no ita ni kore o yottsu bun nuru to koo narimasu

ぜんぶで ☐ は １５こあります。
Zenbu de wa ko arimasu

▨ は ８こ あります。
wa hakko arimasu

だから、 1 dℓで ぬれる ひろさは $\dfrac{8}{15}$ m²です。
Dakara de nureru hirosa wa desu
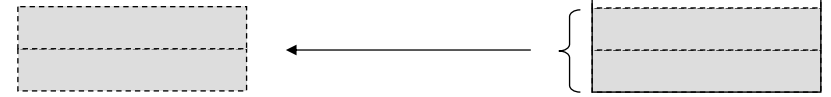
けいさんした こたえと おなじですね。
Keesan shita kotae to onaji desune
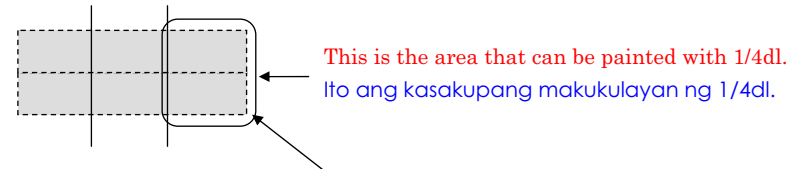
Check with the diagram.
Suriin ito sa diagram.
This is 2/5 ㎡ that can be painted with 3/4dl of paint.
Ito ay 2/5 ㎡ na makukulayan ng 3/4dl.

You can solve the area that can be painted with 1/4dl by dividing this by 3.
Kapag hinati ito sa 3, malalaman ang kasakupang makukulayan ng 1/4dl.

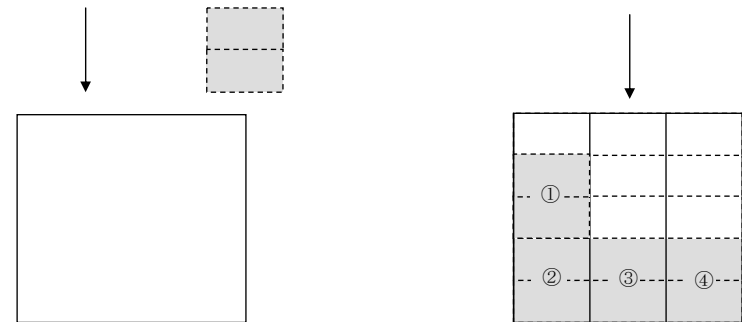This is the area that can be painted with 1/4dl.
Ito ang kasakupang makukulayan ng 1/4dl.

Because 1dl is 4/4dl, 4 pieces of this are needed.
Ang 1dl ay 4/4dl kaya kailangang 4 na bahagi nito.

If 4 pieces of this are painted to 1 ㎡ of board, the board changes like this.
Kapag kinulayan ang 4 na bahagi nito sa 1 ㎡ na tabla, ganito magbabago ang tabla.

There are 15 ☐ in all.
Mayroong 15 ☐ ang lahat.

There are 8 ▨
Mayroong 8 ▨

So the area that can be painted with 1dl is 8/15 ㎡.
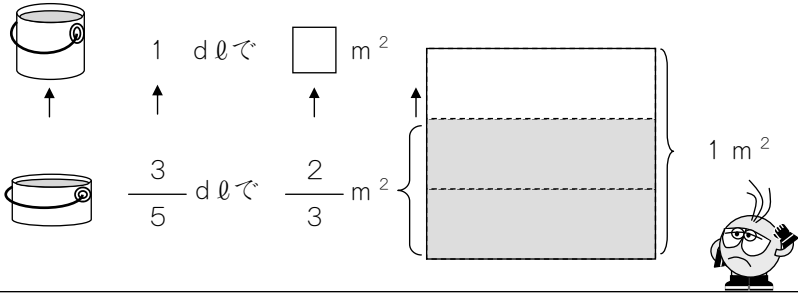Kaya ang kasakupang makukulayan ng 1dl ay 8/15 ㎡.

The answer is the same with that solved in calculation.
Pareho ang sagot sa nalaman sa pagkakalkula.

$\dfrac{3}{5}$ dℓで いたを $\dfrac{2}{3}$ m² ぬれる ペンキが あります。

このペンキを 1 dℓつかいました。なんm² ぬれましたか。

1 dℓで □ m²

$\dfrac{3}{5}$dℓで $\dfrac{2}{3}$ m²　} 1 m²

ペンキ Penki	$\dfrac{3}{5}$ dℓ → 1 dℓ
ひろさ Hirosa	m² →

ペンキの りょうが なんばいに なったのかを しらべます。
Penki　no　ryoo　ga　nanbai　ni　natta　noka　o　shirabemasu

$1 \div \dfrac{3}{5} = \dfrac{\square}{\square}$

だから、ぬれる ひろさも $\dfrac{\square}{\square}$ ばい します。
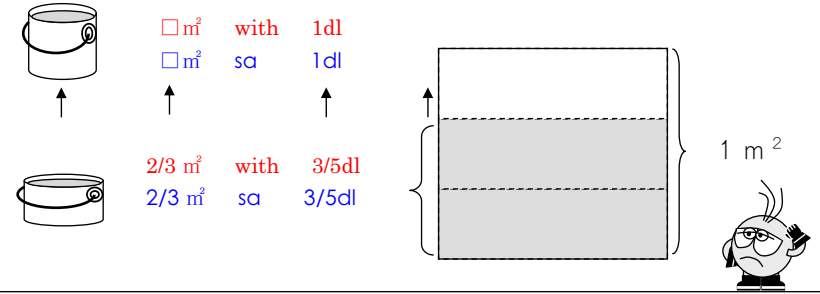Dakara　nureru　hirosa　mo　　bai　　shimasu

（しき）　$\dfrac{2}{3} \times \dfrac{\square}{\square} =$
shiki

（こたえ）
kotae

There is paint, 3/5dl of which is enough to paint 2/3 ㎡ of board.
Mayroong pintura na 3/5dl nito ay makakakulay ng 2/3 ㎡ ng tabla.
1dl of this paint was used. How many ㎡ was painted?
Ginamit ang 1dl ng pinturang ito. Ilang ㎡ ang nakulayan nito?

□㎡　with　1dl
□㎡　sa　　1dl

2/3 ㎡　with　3/5dl
2/3 ㎡　sa　　3/5dl　} 1 m²

paint pintura	$\dfrac{3}{5}$ dℓ → 1 dℓ
area lawak	m² →

Find out how many times of the original amount of paint is the second one.
Suriin kung ilang beses ng pinagmulang dami ng pintura ang dami nito.

$1 \div \dfrac{3}{5} = \dfrac{\square}{\square}$

So the area that can be painted should also be made □ times.
Kaya ang kasakupang makukulayan din ay gagawing □ beses.

（Formula）$\dfrac{2}{3} \times \dfrac{\square}{\square} =$

（Answer）

この もんだいの かんたんな ときかたが あります。
Kono mondai   no kantan   na toki kata ga arimasu

おぼえておくと べんりです。
Oboete   okuto   benri   desu

ぬった ひろさ	÷	つかったペンキ	=	1 dℓで ぬれる ひろさ
Nutta hirosa		tsukatta penki		de nureru hirosa

painted area ÷ paint used = the area that can be painted with 1dl
kasakupang nakulayan ÷ ginamit na pintura = Ikasakupang makukulayan ng 1dl

これを つかって、1と 2の もんだいを けいさんしてみましょう。
Kore o tsukatte,   to no mondai o keesan   shitemimashoo

Calculate question 1 and 2 by using this.
Gamitin ito sa pagkalkula ng 1 at 2.

1 ぬったひろさは $\frac{2}{5}$ m² で、つかったペンキは $\frac{3}{4}$ dℓです。
  Nutta hirosa wa   de tsukatta penki wa   desu

1 The painted area is 2/5 ㎡ and the paint used is 3/4dl.
Ang kasakupang nakulayan ay 2/5 ㎡ at ang ginamit na pintura naman ay 3/4dl.

$$ \boxed{} \div \boxed{} = \boxed{} \times \boxed{} $$

$$ = \boxed{} $$

$\frac{8}{15}$ になりますか。
ni narimasuka
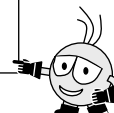
Is the answer 8/15?
Ang sagot ba ay 8/15?

2 ぬったひろさは $\frac{2}{3}$ m² で、つかったペンキは $\frac{3}{5}$ dℓです。

2 The painted area is 2/3 ㎡ and the paint used is 3/5dl.
Ang kasakupang nakulayan ay 2/3 ㎡ at ang ginamit na pintura naman ay 3/5dl.

$$ \boxed{} \div \boxed{} = \boxed{} \times \boxed{} $$

$$ = \boxed{} $$

$\frac{10}{9}$ になりますか。

Is the answer 10/9?
Ang sagot ba ay 10/9?

$\dfrac{1}{3}$ dℓで いたを $\dfrac{3}{5}$ m² ぬれる ペンキが あります。

このペンキを 1dℓつかいました。なんm² ぬれましたか。

$\dfrac{1}{3}$ dℓで $\dfrac{1}{5}$ m²

1 m²
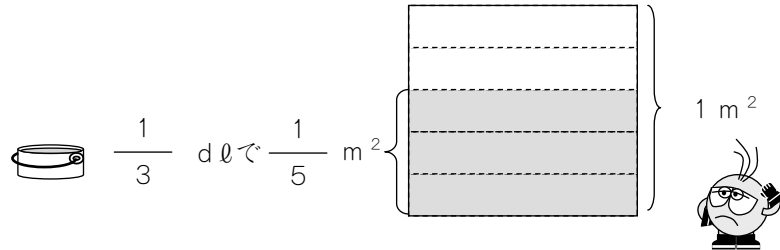
ペンキ	$\dfrac{1}{3}$ dℓ ➡	1 dℓ
ひろさ	m² ➡	

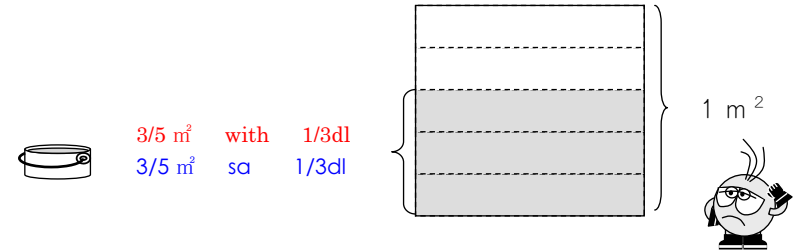| ぬった ひろさ	÷	つかったペンキ	=	1dℓで ぬれる ひろさ

この しきを つかって、けいさんしましょう。
Kono　shiki o　tsukatte　　keesan　　shimashoo

（しき）

（こたえ）

There is paint, 1/3dl of which is enough to paint 3/5 ㎡ of board.
Mayroong pintura na 1/3dl nito ay makakakulay ng 3/5 ㎡ ng tabla.
1dl of this paint was used. How many ㎡ was painted?
Ginamit ang 1dl ng pinturang ito. Ilang ㎡ ang nakulayan nito?

3/5 ㎡　　with　　1/3dl
3/5 ㎡　　sa　　1/3dl

1 m²

paint pintura	$\dfrac{1}{3}$ dℓ ➡	1 dℓ
area lawak	m² ➡	

painted area kasakupang nakulayan	÷	paint used ginamit na pintura	=	the area that can be painted with 1dl Ikasakupang makukulayan ng 1dl

Calculate by using this formula.
Gamitin ang formulang ito sa pagkalkula.

（Formula）

（Answer）

4

$\dfrac{4}{5}$ m の おもさが $\dfrac{5}{7}$ kg の はりがねが あります。
no omosa ga　　　no　harigane　ga　arimasu

この はりがね 1m では、なん kg に なりますか。
Kono　harigane　　dewa　nan　　ni　narimasuka

$\dfrac{4}{5}$ m で $\dfrac{5}{7}$ kg
de

1m で ☐ kg
de

はりがねの ながさ Harigane no nagasa	$\dfrac{4}{5}$ m →	1 m
はりがねの おもさ Harigane no omosa	$\dfrac{5}{7}$ kg →	☐ kg

これも ペンキの もんだいと おなじように かんがえることが
Kore mo　penki　no　mondai　to　onaji　you　ni　kangaeru　koto ga
できます。
dekimasu

おもさ	÷	ながさ	=	1mの おもさ
Omosa		Nagasa		no omosa

このしきを つかって、1mの おもさを けいさんしましょう。
Kono shiki　o　tsukatte　　　no　omosa　o　keesan　shimashoo

（しき）

（こたえ）

4

There is a wire whose weight per 4/5m is 5/7kg.
Mayroong kawad na ang kabigatan ng 4/5m nito ay 5/7kg.
How many kg is 1m of this wire?
Ilang kg ang 1m ng kawad na ito?

5/7kg with 4/5m
5/7kg sa 4/5m

☐kg with 1m
☐kg sa 1m

length of the wire haba ng kawad	$\dfrac{4}{5}$ m →	1 m
weight of the wire kabigatan ng kawad	$\dfrac{5}{7}$ kg →	☐ kg

This can also be solved in the same way as the problems on paint.
Mapag-iisipan din ito sa parehong paraan ng suliranin sa pintura.

weight kabigatan	÷	length haba	=	weight of 1m kabigatan ng 1m

Calculate the weight of 1m with this math formula.
Kalkulahin ang kabigatan ng 1m sa gamit ng math formula na ito.

（Formula）

（Answer）

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