Year 4 Maths Tuesday 9.1.21

Fractions

Recall: Subtracting fractions

9/10 – 4/10 =

3/7 – 1/7 =

7/8 – 2/8 =

8/9 – 6/9 =

LO: I can subtract a fraction from a whole.

Guided Practice:

How could we solve 1 – 3/10 = ?

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Because we are subtracting tenths, we first need to convert our whole 1 into tenths.

$$1 = 10/10$$

Guided Practice:

How could we solve 1 – 3/10 = ?

Now we can subtract the 3/10

$$10/10 - 3/10 = 7/10$$

Guided Practice:

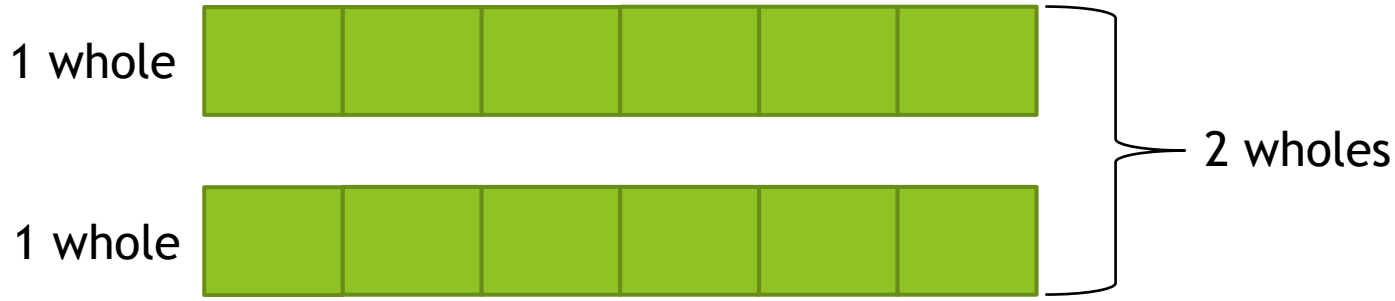
How about 2 – 4/6 = ?

Let’s recap the steps…

Guided Practice:

How about 2 – 4/6 = ?

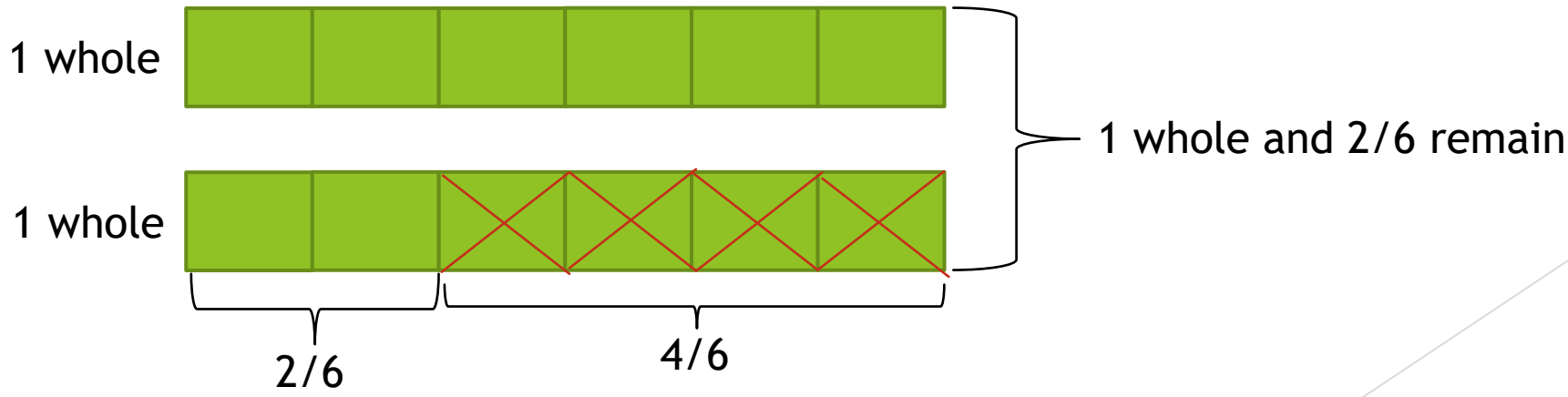
We have 2 whole ones and we're subtracting sixths, so we need to split EACH whole 1 into 6/6.

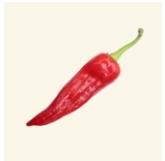


Guided Practice:

How about 2 – 4/6 = ?

Now we can subtract our 4/6 from one of the wholes



Intelligent practice: 

9/9 – 7/9 =

10/10 – 4/10 =

8/8 – 2/8 =

6/6 – 3/6 =

12/12 – 9/12 =

7/7 – 2/7 =

Intelligent practice: 

9/9 – 7/9 = 2/9

10/10 – 4/10 = 6/10

8/8 – 2/8 = 6/8

6/6 – 3/6 = 3/6

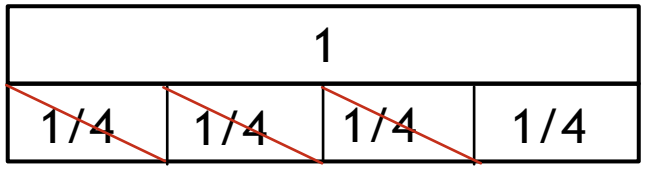
12/12 – 9/12 = 3/12

7/7 – 2/7 = 5/7

Intelligent practice:

Use a bar model to subtract these fractions eg:

$1 - \frac{3}{4} =$



$= 1/4$

$1 - 3/5 =$

$1 - 3/6 =$

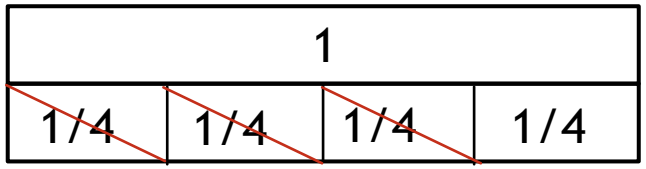
$1 - 1/3 =$

$1 - \frac{1}{4} =$

Intelligent practice:

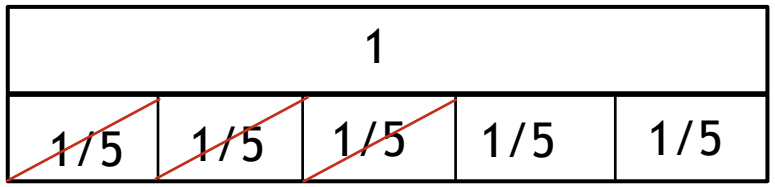
Use a bar model to subtract these fractions eg:

$1 - \frac{3}{4} =$



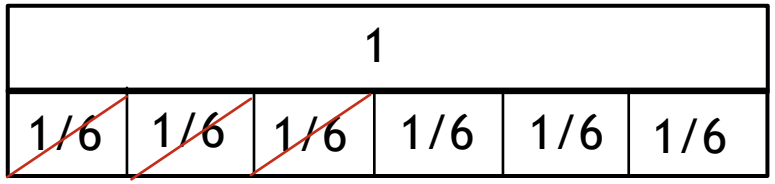
$= 1/4$

$1 - 3/5 =$



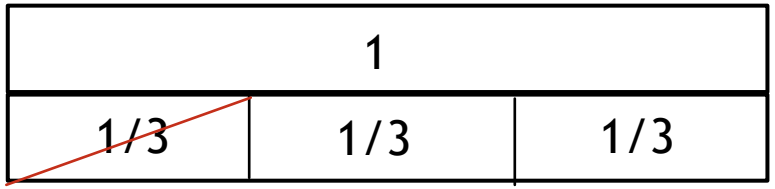
$= 2/5$

$1 - 3/6 =$



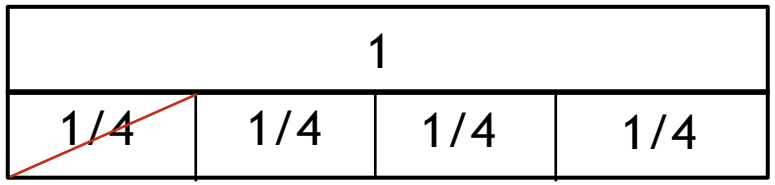
$= 3/6$

$1 - 1/3 =$



$= 2/3$

$1 - \frac{1}{4} =$



$= 3/4$

Intelligent practice:

Use diagrams similar to those in the guided practice to find the answers to these

2 – 1/4 =

2 – 2/6 =

3 – 1/2 =

3 – 5/4 =

Intelligent practice:

Use diagrams similar to those in the guided practice to find the answers to these

2 – 1/4 = 1 3/4

2 – 2/6 = 1 4/6

3 – 1/2 = 2 ½

3 – 5/4 = 1 3/4

Dive deeper 1:

Dora is subtracting a fraction from a whole.

$5 - \frac{3}{7} = \frac{2}{7}$

Can you spot her mistake?

What should the answer be?

Dive deeper 1: Answer

Dora is subtracting a fraction from a whole.

$5 - \frac{3}{7} = \frac{2}{7}$

Can you spot her mistake?

What should the answer be?

Dora has not recognised that 5 is equivalent to $\frac{35}{7}$

$5 - \frac{3}{7} = \frac{33}{7} = 4\frac{5}{7}$

Dive deeper 2:

Whitney has a piece of ribbon that is 3 metres long.

She cuts it into 12 equal pieces and gives Teddy 3 pieces.

How many metres of ribbon does Whitney have left?

Hint: Use drawings to help you explain

Dive deeper 2: Answer

Whitney has a piece of ribbon that is 3 metres long.

She cuts it into 12 equal pieces and gives Teddy 3 pieces.

How many metres of ribbon does Whitney have left?

Cutting 3 metres of ribbon into 12 pieces means each metre of ribbon will be in 4 equal pieces. Whitney will have $\frac{12}{4}$ to begin with.

$$\frac{12}{4} - \frac{3}{4} = \frac{9}{4} = 2\frac{1}{4}$$

Whitney has $2\frac{1}{4}$ metres of ribbon left.