

P3 Singapore Math
Fractions Word Problems **1**

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Name: _____ Date: _____

Learning Goal:

- Make the fractions equivalent
- Decide whether to add or subtract
- Ensure that final answers are written in the simplest form

Glossary Word List

Numerator	ตัวเศษ
Denominator	ตัวส่วน
Equivalent fractions	เศษส่วนที่เท่ากัน
Simplify the fractions	ทำให้เป็นเศษส่วนอย่างต่ำ

Feel free to add in any words into this table for your own reference.





Example:

Frank ate $\frac{1}{12}$ of a cake. Winnie ate $\frac{1}{4}$ of the same cake. What fraction of the cake did they eat altogether?

$$\frac{1}{4} = \frac{3}{12}$$

Diagram showing the conversion of $\frac{1}{4}$ to $\frac{3}{12}$. A blue arrow points from the numerator 1 to 3 with a label $\times 3$. Another blue arrow points from the denominator 4 to 12 with a label $\times 3$.

1. Make the fractions equivalent

- Multiply the numerator and denominator by the same number.
- To know which number to multiply by, think: $4 \times \underline{\quad} = 12$
- We choose to make the denominator to 12 so that both fractions can have the same denominator.

$$\frac{1}{12} + \frac{3}{12} = \frac{4}{12}$$

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

2. Add the fractions

- We add to find how much both of them ate altogether.

3. Check if it is in the simplest form.

- If it is not in the simplest form, divide the numerator and denominator by the same number.
- In this case, we divide 4 by 4 and 12 by 4

They ate $\frac{1}{3}$ altogether.

1. $\frac{3}{5}$ of Mina's pencils were blue. $\frac{1}{10}$ of them were green. What fraction of her pencils were blue and green?



How can we make the fractions equivalent?

2. Sienna ate $\frac{5}{12}$ of the cookies in the jar. Melissa ate $\frac{1}{6}$ of the cookies in the jar. Who ate fewer cookies? How much fewer did she eat than her friend?



We are comparing 2 fractions. One of them ate more and the other ate less. First, what should we do to know who ate more and who ate less?

Then, what should we do to know how much fewer she ate than her friend?

I wonder if you have answered all parts of the question.



Is it in its simplest form?

There are 2
questions above.
Have you
answered both?



3. Jerome used $\frac{3}{20}$ of the pencils in the classroom. Keith used $\frac{1}{10}$ of the pencils in the classroom. Who used more pencils? How much more pencils did he use than his classmate?

Hint! Never end a question
without checking if the
fraction is in its simplest form



4. Eva gave $\frac{2}{3}$ of the cupcakes that her family had to her cousin. Then, her mother threw away $\frac{2}{15}$ of the cupcakes that they had because they had gone bad. What fraction of the cupcakes were gone?



Before adding or
subtracting, what should
we do to the fractions?

Good habits to
have: Let's check
our work before
deciding that it is
done 😊



ANSWER KEY

1. $\frac{3}{5} = \frac{6}{10}$ (Blue pencils)

$$\frac{6}{10} + \frac{1}{10} = \frac{7}{10}$$

$\frac{7}{10}$ of her pencils were blue and green.

2. $\frac{1}{6} = \frac{2}{12}$ (Melissa)

$$\begin{aligned}\frac{5}{12} - \frac{2}{12} &= \frac{3}{12} \\ &= \frac{1}{4}\end{aligned}$$

Melissa ate fewer cookies. She ate $\frac{1}{4}$ fewer cookies than Sienna.

3. $\frac{1}{10} = \frac{2}{20}$ (Keith)

$$\frac{3}{20} - \frac{2}{20} = \frac{1}{20}$$

Jerome used more pencils. He used $\frac{1}{20}$ of the pencils more than his classmate.

ANSWER KEY

4. $\frac{2}{3} = \frac{10}{15}$

$$\frac{10}{15} + \frac{2}{15} = \frac{12}{15}$$
$$= \frac{4}{5}$$

$\frac{4}{5}$ of the cupcakes were gone.