

This week we are recapping on Fractions, decimals and percentages (FDP)

LO: To simplify fractions and find common denominators (bronze)

Practise/ Fluency Simplify these fractions to their lowest forms.

- 1) $\frac{3}{9}$
- 2) $\frac{10}{20}$
- 3) $\frac{15}{20}$
- 4) $\frac{30}{40}$
- 5) $\frac{45}{100}$
- 6) $\frac{24}{36}$
- 7) $\frac{12}{16}$
- 8) $\frac{62}{100}$

Convert these fractions to the same denominator.

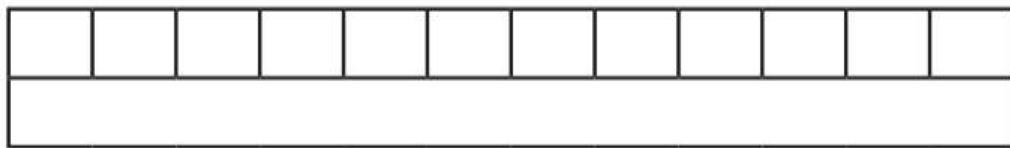
- 9) $\frac{2}{7}$ $\frac{3}{8}$
- 10) $\frac{3}{5}$ $\frac{4}{7}$
- 11) $\frac{2}{3}$ $\frac{3}{5}$

Which is greater?

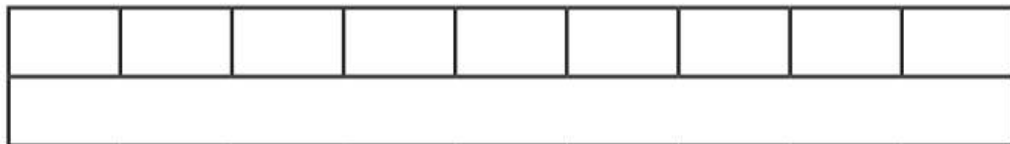
- 12) $\frac{2}{3}$ or $\frac{4}{7}$
- 13) $\frac{2}{3}$ or $\frac{3}{5}$
- 14) $\frac{3}{4}$ or $\frac{4}{5}$

15)

a) Draw lines on the bar model to show that $\frac{9}{12}$ is equal to $\frac{3}{4}$



b) Complete each bar model and calculation.



= $\frac{3}{9}$

This week we are recapping on Fractions, decimals and percentages (FDP)

LO: To simplify fractions and find common denominators (silver)

Practise/ Fluency Simplify these fractions to their lowest forms.

- 1) $12/16$
- 2) $62/100$
- 3) $70/100$
- 4) $36/90$
- 5) $32/88$
- 6) $30/75$

Convert these fractions to the same denominator.

- 7) $3/4$ $5/6$
- 8) $2/7$ $3/5$

Which is greater?

- 9) $7/9$ or $8/10$

Reasoning

10) Amy thinks that $2/5$ in its simplest form is $1/2.5$. Do you agree? Convince me.

11) Sarah and her friends are adding the fractions below. Her friend is trying to put the following fractions into the same denominator. Sarah tells her she doesn't need to because the answer is 1. Is she right? Explain why.

$12/24$ $14/28$

12) Always, sometimes, never? To simplify a fraction you divide the numerator and denominator by 2 over and over. Explain your answer using examples.

13) Teddy and Dora are both simplifying $\frac{30}{42}$

Teddy

$$\frac{30}{42} = \frac{15}{21} = \frac{5}{7}$$

Dora

$$\frac{30}{42} = \frac{5}{7}$$

a) How do you think Dora was able to simplify the fraction in one step?

b) Simplify these fractions in one step.

$$\frac{24}{30} = \boxed{}$$

$$\frac{16}{20} = \boxed{}$$

$$\frac{56}{64} = \boxed{}$$

$$\frac{99}{121} = \boxed{}$$

This week we are recapping on Fractions, decimals and percentages (FDP)

LO: To simplify fractions and find common denominators (gold)

Practise/ Fluency Simplify these fractions to their lowest forms.

- 1) $30/75$
- 2) $16/80$
- 3) $33/99$
- 4) $42/63$

Convert these fractions to the same denominator.

- 5) $2/7$ $3/5$

Which is greater?

- 6) $7/9$ or $8/10$

Reasoning

7) Sarah and her friends are adding the fractions below. Her friend is trying to put the following fractions into the same denominator. Sarah tells her she doesn't need to because the answer is 1. Is she right? Explain why.

- $12/24$ $14/28$

Problem Solving

8) Find three fractions that can be simplified 5 times.

9) What fraction has a denominator of 30 and when it is simplified it becomes $2/5$? Find three other examples that simplify to $2/5$.

10) A charity was asking for people to volunteer to help in their shop each day. Samantha said she would do $3/8$ of Monday. Betty said that she would do $6/12$ of Monday. Who did more hours and by how many?

- 11) $\frac{\text{★}}{\text{♥}}$ is a prime number. ♥ is a multiple of 10

The fraction can be simplified.

What could each number be? Explain your reasoning.

This week we are recapping on Fractions, decimals and percentages (FDP)

LO: To simplify fractions and find common denominators (bronze) - answers

Practise/ Fluency Simplify these fractions to their lowest forms.

- 1) $1/3$
- 2) $1/2$
- 3) $3/4$
- 4) $3/4$
- 5) $9/20$
- 6) $2/3$
- 7) $3/4$
- 8) $31/50$

Convert these fractions to the same denominator.

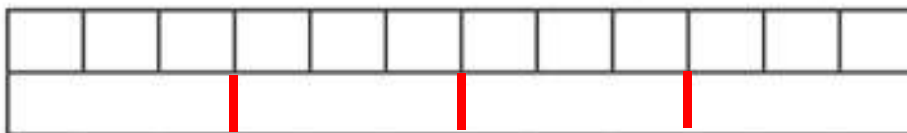
- 9) $16/56$ $21/56$
- 10) $21/35$ $20/35$
- 11) $10/15$ $9/15$

Which is greater?

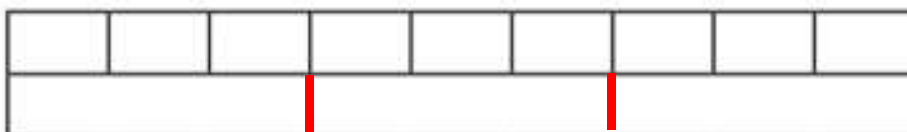
- 12) $2/3$
- 13) $2/3$
- 14) $4/5$

15)

a) Draw lines on the bar model to show that $\frac{9}{12}$ is equal to $\frac{3}{4}$



b) Complete each bar model and calculation.



$\frac{1}{3}$	=	$\frac{3}{9}$
---------------	---	---------------

This week we are recapping on Fractions, decimals and percentages (FDP)

LO: To simplify fractions and find common denominators (silver) - answers

Practise/ Fluency Simplify these fractions to their lowest forms.

- 1) $\frac{3}{4}$
- 2) $\frac{31}{50}$
- 3) $\frac{7}{10}$
- 4) $\frac{2}{5}$
- 5) $\frac{4}{11}$
- 6) $\frac{2}{5}$

Convert these fractions to the same denominator.

- 7) $\frac{18}{24}$ $\frac{20}{24}$
- 8) $\frac{10}{35}$ $\frac{21}{35}$

Which is greater?

- 9) $\frac{8}{10}$

Reasoning

- 10) No because a fraction can't have a decimal number within it.
- 11) Yes because both fractions are equivalent to a $\frac{1}{2}$ which means when they are added together they will equal a whole 1.
- 12) Sometimes - If both numbers are even then they can be divided by 2 whereas some can't but can be simplified e.g. $\frac{15}{20}$ as both are divisible by 5.

13)

Teddy and Dora are both simplifying $\frac{30}{42}$

Teddy

$$\frac{30}{42} = \frac{15}{21} = \frac{5}{7}$$

Dora

$$\frac{30}{42} = \frac{5}{7}$$

- a) How do you think Dora was able to simplify the fraction in one step?
- b) Simplify these fractions in one step.

She looked for the highest common factor

$$\frac{24}{30} = \frac{4}{5}$$

$$\frac{16}{20} = \frac{4}{5}$$

$$\frac{56}{64} = \frac{7}{8}$$

$$\frac{99}{121} = \frac{9}{11}$$

This week we are recapping on Fractions, decimals and percentages (FDP)

LO: To simplify fractions and find common denominators (gold) - answers

Practise/ Fluency Simplify these fractions to their lowest forms.

- 1) $\frac{2}{5}$
- 2) $\frac{1}{5}$
- 3) $\frac{1}{3}$
- 4) $\frac{2}{3}$

Convert these fractions to the same denominator.

- 5) $\frac{10}{35}$ $\frac{21}{35}$

Which is greater?

- 6) $\frac{8}{10}$




Reasoning

7) Yes because both fractions are equivalent to a $\frac{1}{2}$ which means when they are added together they will equal a whole 1.

Problem Solving

- 8) Answers may vary.
- 9) $\frac{12}{30}$ - Other examples will vary
- 10) Betty did more by $\frac{3}{24}$ or $\frac{1}{8}$

11)

  is a prime number.  is a multiple of 10

The fraction can be simplified.

What could each number be? Explain your reasoning.

Answers will vary e.g.

$\frac{2}{20}$

$\frac{5}{20}$

$\frac{7}{70}$
