

Monday 8<sup>th</sup> May

Weekly Arithmetic!

Here is a link for this week's arithmetic questions.

<https://myminimaths.co.uk/year-6-arithmetic-practice-papers/>

Click on week 4 practice paper. All the week's questions are on one sheet - there are around 10 - 12 questions. You can check your answers yourself, and if you have made any errors, see if you can work out why. Enjoy!

If you wish, you may use BBC Bitesize for your Maths this week. This is the schedule:

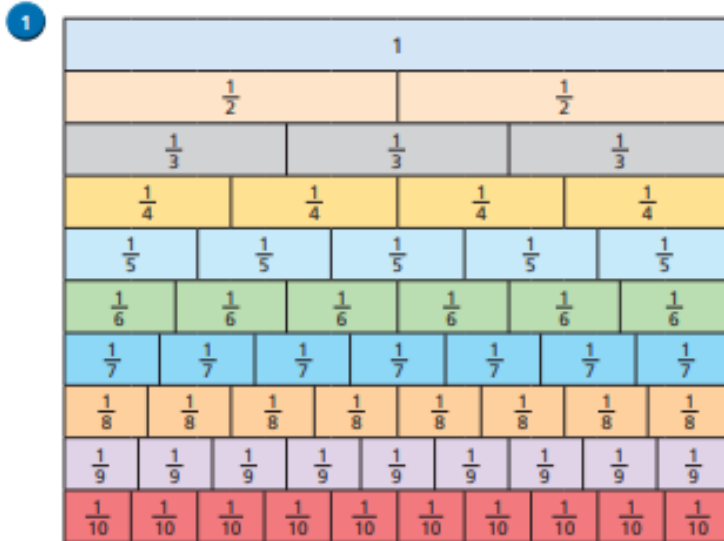
| Year 6/ P7 online lessons<br>Monday 11 May - Friday 15 May          |   |  |   |                                       |
|---|---|--|---|---------------------------------------|
| Monday  | Tuesday   | Wednesday                                    | Thursday  | Friday                                |
| <b>Maths</b><br>Multiplying fractions and mixed numbers by integers | <b>Maths</b><br>Multiply fractions by fractions | <b>Maths</b><br>Divide fractions by integers | <b>Maths</b><br>Fractions of amounts applied in context | <b>Maths</b><br>Challenge of the week |

On the next page is our White Rose work. This week we are working on Fractions.

Answers are included at the end, so again, if you make a mistake, can you work out why you did?

Simplify Fractions Video: <https://whiterosemaths.com/homelearning/year-6/> Use **Summer Term - Week 3 (w/c 4th May)**

## Simplify fractions



Use the fraction wall to write each fraction in its simplest form.

a)  $\frac{4}{6} = \square$

c)  $\frac{6}{8} = \square$

b)  $\frac{8}{10} = \square$

d)  $\frac{4}{8} = \square$

- 2 a) Use a fraction wall to explain why  $\frac{7}{10}$  does not simplify.

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- b) Find three more fractions on the fraction wall that cannot be simplified.

- 3 Mo, Eva and Ron are trying to simplify  $\frac{5}{20}$



I can't simplify this because one number is odd and the other is even.

Mo

I can't simplify this because only one number can be halved.



Eva



I can simplify any fraction.

Ron

Do you fully agree, partly agree or completely disagree with each person?

Talk to a partner.



- 4 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.



$$\frac{\square}{\square} = \frac{3}{9}$$



$$\frac{\square}{\square} = \frac{5}{15}$$

- 5 Simplify the fractions.

|   |   |   |   |
|---|---|---|---|
| a) $\frac{4}{12} = \frac{\square}{\square}$ | b) $\frac{8}{12} = \frac{\square}{\square}$ | c) $\frac{40}{120} = \frac{\square}{\square}$ | d) $\frac{12}{4} = \frac{\square}{\square}$ |
| $\frac{4}{16} = \frac{\square}{\square}$    | $\frac{8}{16} = \frac{\square}{\square}$    | $\frac{40}{160} = \frac{\square}{\square}$    | $\frac{120}{4} = \frac{\square}{\square}$   |
| $\frac{4}{20} = \frac{\square}{\square}$    | $\frac{8}{20} = \frac{\square}{\square}$    | $\frac{40}{200} = \frac{\square}{\square}$    | $\frac{12}{400} = \frac{\square}{\square}$  |

Describe and explain any patterns that you noticed.

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- 6 Write 3 fractions that simplify to  $\frac{3}{5}$

- 7 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.

$$\frac{24}{30} = \frac{\square}{\square} \qquad \frac{16}{20} = \frac{\square}{\square}$$

$$\frac{56}{64} = \frac{\square}{\square} \qquad \frac{99}{121} = \frac{\square}{\square}$$

- 8 is a prime number. is a multiple of 10

The fraction can be simplified.

What could each number be? Explain your reasoning.

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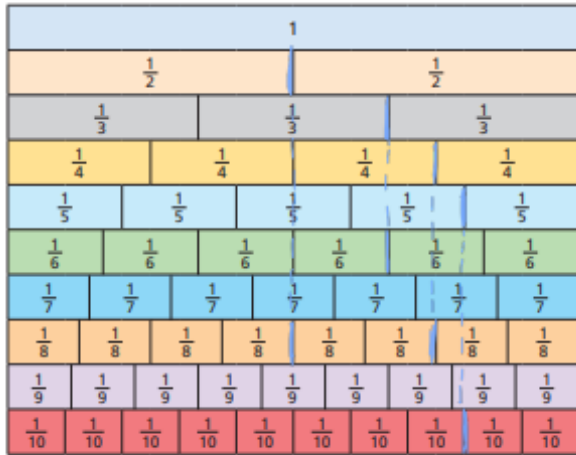


Answers

Simplify fractions



1



Use the fraction wall to write each fraction in its simplest form.

a)  $\frac{4}{6} = \frac{2}{3}$

c)  $\frac{6}{8} = \frac{3}{4}$

b)  $\frac{8}{10} = \frac{4}{5}$

d)  $\frac{4}{8} = \frac{1}{2}$

2 a) Use a fraction wall to explain why  $\frac{7}{10}$  does not simplify.

*It is already in its simplest form.*

b) Find three more fractions on the fraction wall that cannot be simplified.

e.g.  $\frac{2}{3}$       $\frac{3}{7}$       $\frac{9}{10}$

3 Mo, Eva and Ron are trying to simplify  $\frac{5}{20}$



I can't simplify this because one number is odd and the other is even.

Mo



I can't simplify this because only one number can be halved.

Eva



I can simplify any fraction.

Ron

Do you fully agree, partly agree or completely disagree with each person?

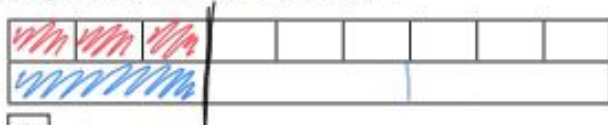
Talk to a partner.



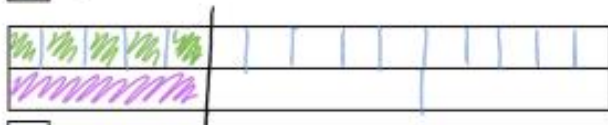
- 4 a) Draw lines on the bar model to show that  $\frac{9}{12}$  is equal to  $\frac{3}{4}$



- b) Complete each bar model and calculation.



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



$$\frac{1}{3} = \frac{5}{15}$$

- 5 Simplify the fractions.

a)  $\frac{4}{12} = \frac{1}{3}$     b)  $\frac{8}{12} = \frac{2}{3}$     c)  $\frac{40}{120} = \frac{1}{3}$     d)  $\frac{12}{4} = 3$

$\frac{4}{16} = \frac{1}{4}$      $\frac{8}{16} = \frac{1}{2}$      $\frac{40}{160} = \frac{1}{4}$      $\frac{120}{4} = 30$

$\frac{4}{20} = \frac{1}{5}$      $\frac{8}{20} = \frac{2}{5}$      $\frac{40}{200} = \frac{1}{5}$      $\frac{12}{400} = \frac{3}{100}$

Describe and explain any patterns that you noticed.

Various answers



- 6 Write 3 fractions that simplify to  $\frac{3}{5}$

e.g.  $\frac{6}{10}$      $\frac{9}{15}$      $\frac{12}{20}$

- 7 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.

$\frac{24}{30} = \frac{4}{5}$      $\frac{16}{20} = \frac{4}{5}$

$\frac{56}{64} = \frac{7}{8}$      $\frac{99}{121} = \frac{9}{11}$

- 8 is a prime number. is a multiple of 10

The fraction can be simplified.

What could each number be? Explain your reasoning.

E.g. 2 is prime, 20 is a multiple of 10  
and  $\frac{2}{20} = \frac{1}{10}$   
so star could be 2 and heart could be 20

