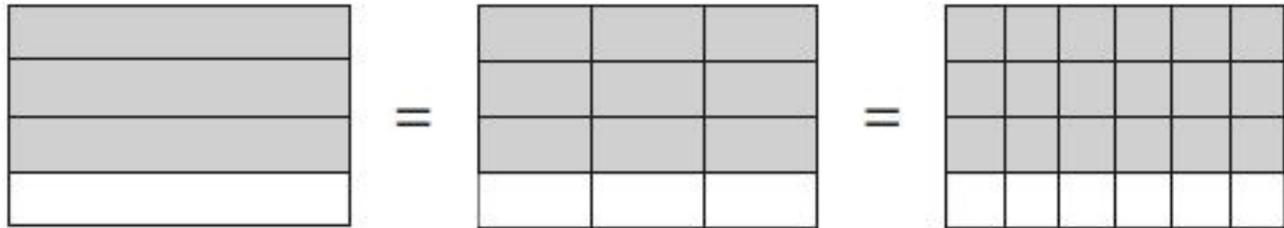


RECALL

These diagrams show three equivalent fractions.



Write the missing values.

$$\frac{3}{4} = \frac{9}{\square} = \frac{\square}{24}$$

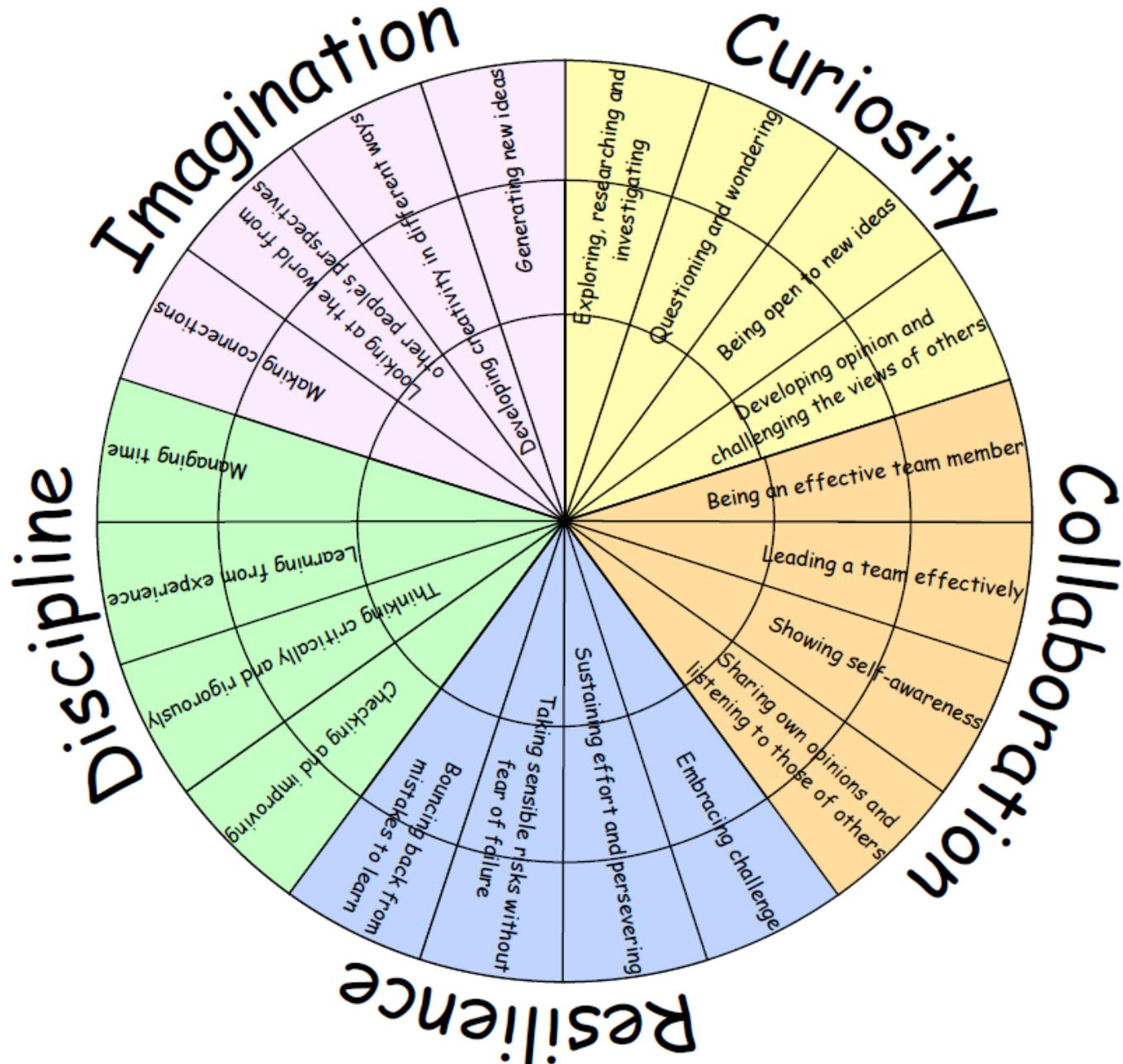


Create your own question

I CAN SIMPLIFY FRACTIONS USING COMMON FACTORS

Fractions (12iii)

LEARNING HABITS?



GUIDED PRACTICE

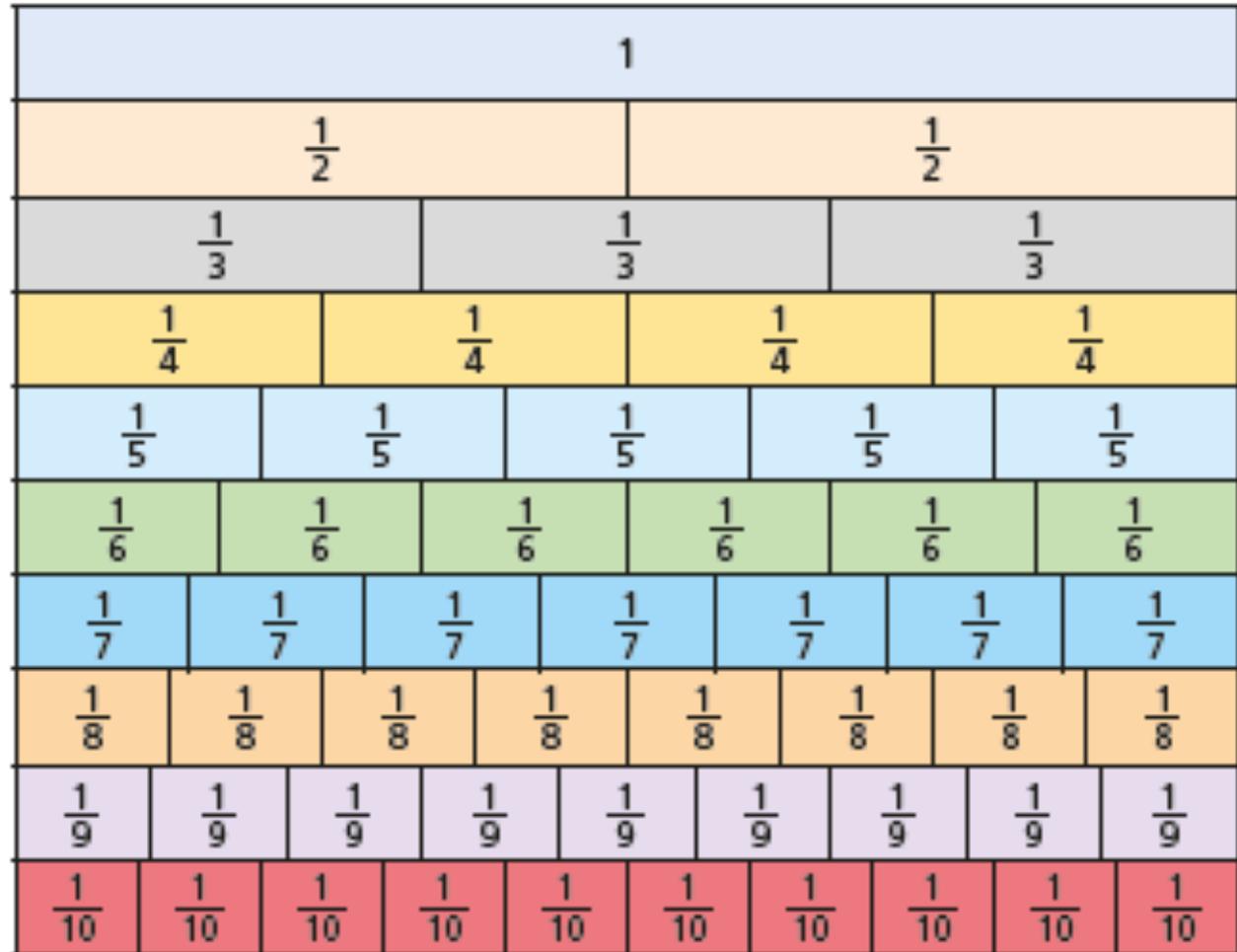
1) Using the fraction wall can you simplify these fractions.

$5/10$

$6/10$

$5/7$

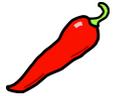
2) Explain how you solved this question



Can you find any other ways to simplify these fractions?

INTELLIGENT PRACTICE

Simplify the fractions



$4/12 =$

$4/16 =$

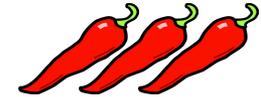
$4/20 =$



$8/12 =$

$8/16 =$

$8/20 =$



$40/120 =$

$40/160 =$

$40/200 =$

Describe and explain any patterns that you noticed.



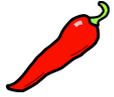
$12/4 = \underline{\quad}$

$120/4 = \underline{\quad}$

$12/400 = \underline{\quad}$

INTELLIGENT PRACTICE ANSWERS

Simplify the fractions



$$4/12 = 1/3$$

$$4/16 = 1/4$$

$$4/20 = 1/5$$



$$8/12 = 2/3$$

$$8/16 = 2/4 = 1/2$$

$$8/20 = 2/5$$



$$40/120 = 1/3$$

$$40/160 = 1/4$$

$$40/200 = 1/5$$

Describe and explain any patterns that you noticed.



$$12/4 = 3$$

$$120/4 = 30$$

$$12/400 = 3/100$$

DIVE DEEPER 1

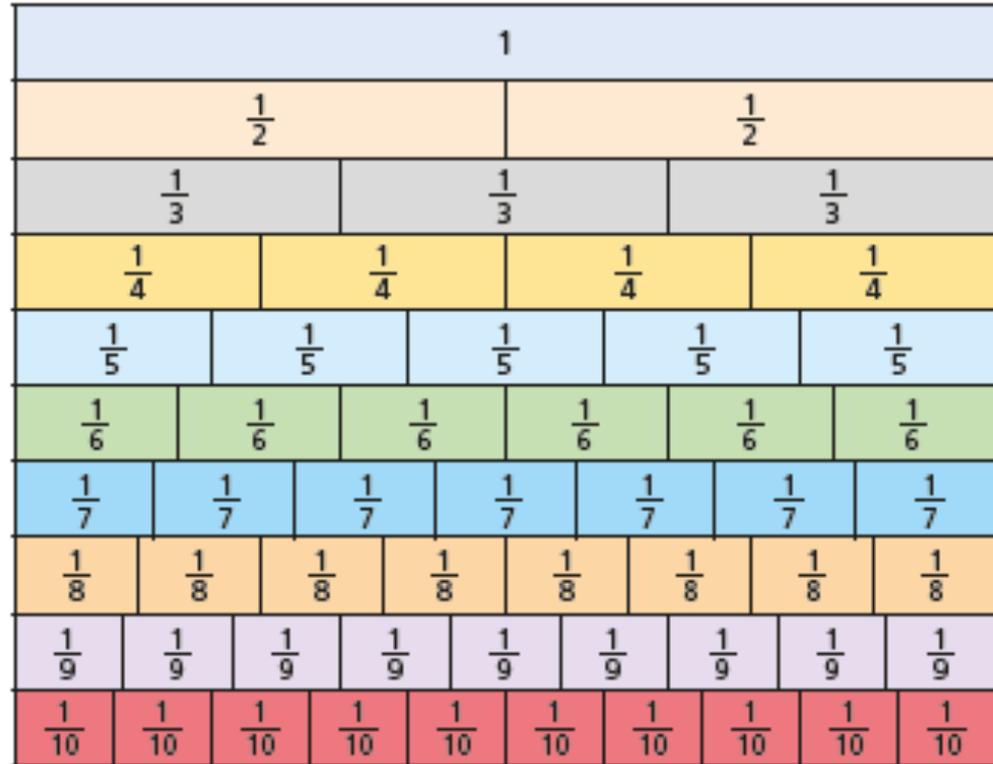
1) Use the fraction wall to write each fraction in its simplest form.

a) $4/6 =$

b) $8/10 =$

c) $6/8 =$

d) $4/8 =$



2a) Use a fraction wall to explain why $7/10$ does not simplify.

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

DIVE DEEPER 1 ANSWERS

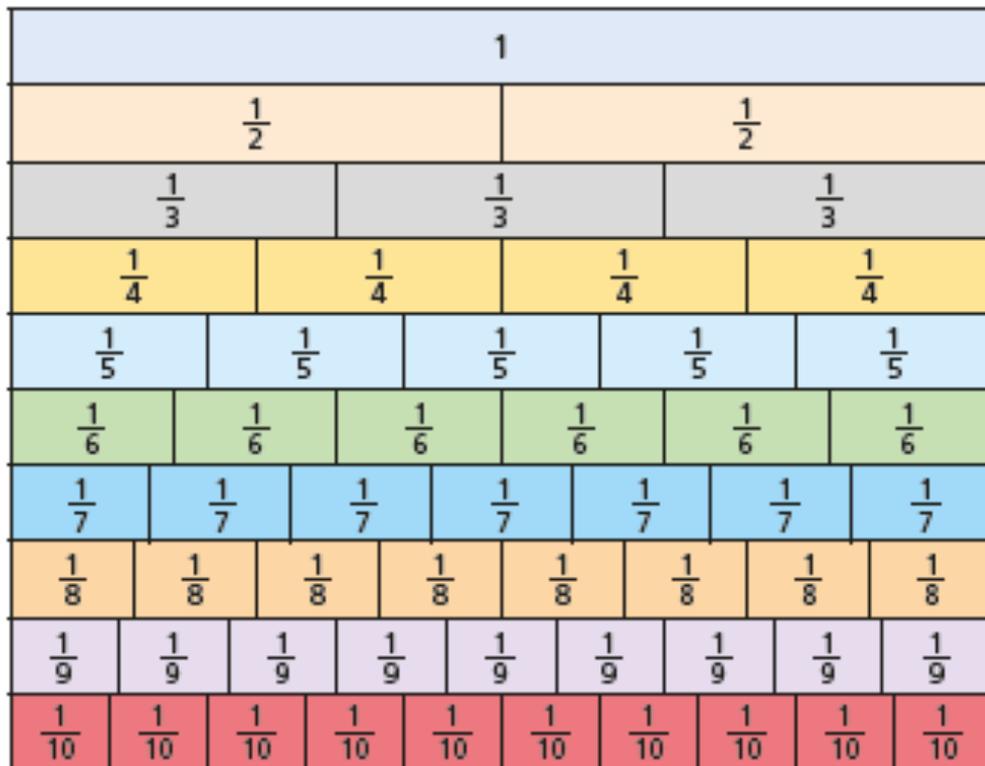
1) Use the fraction wall to write each fraction in its simplest form.

a) $4/6 = 2/3$

b) $8/10 = 4/5$

c) $6/8 = 3/4$

d) $4/8 = 1/2$



2a) Use a fraction wall to explain why $7/10$ does not simplify.

It is already in its simplest form.

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

$2/3$

$3/7$

$9/10$

DIVE DEEPER 2

3) Mo, Eva and Ron are trying to simplify $5/20$.

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

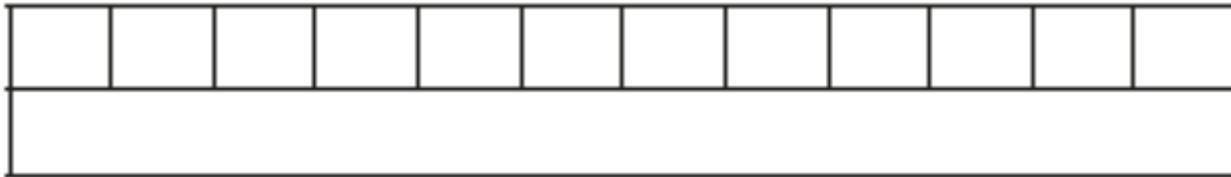
Eva: I can't simplify this because only one number can be halved.

Ron: I can simplify any fraction.

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

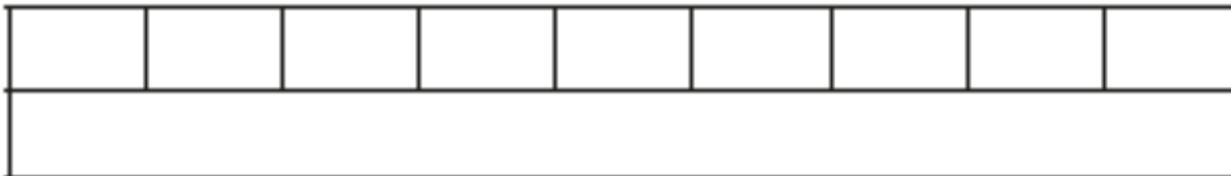
Explain why.

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



b)

___ = $3/9$



DIVE DEEPER 2 ANSWERS

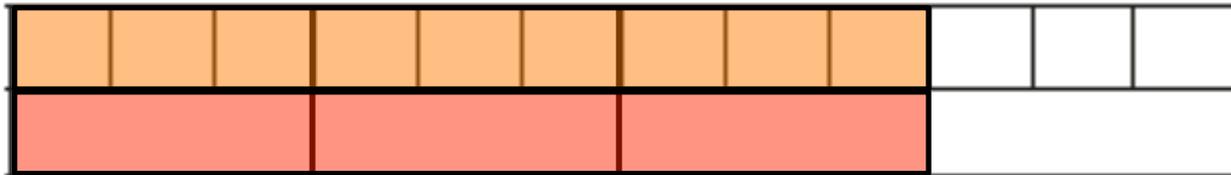
3) Mo, Eva and Ron are trying to simplify $5/20$.

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

Eva: I can't simplify this because only one number can be halved.
Completely disagree

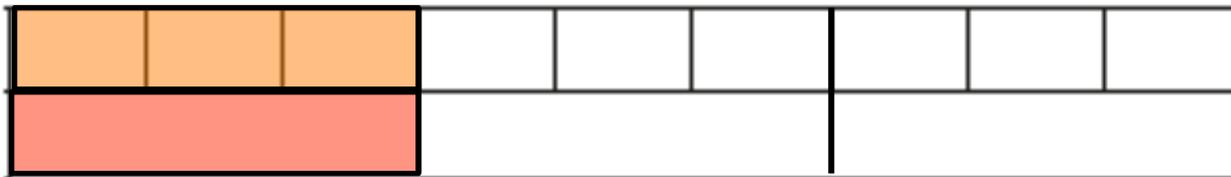
Ron: I can simplify any fraction.
Partly agree

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



b)

$$1/3 = 3/9$$



DIVE DEEPER 3

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

6) 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.

$$24/30 =$$

$$16/20 =$$

$$56/64 =$$

$$99/121 =$$

7) The fraction can be simplified.



is a prime number.



is a multiple of 10

What could each number be? Explain your reasoning.

DIVE DEEPER 3 ANSWERS

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

$$\frac{6}{10}$$

$$\frac{9}{15}$$

$$\frac{12}{20}$$

6) 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?

Dora found the highest common factor of 30 and 42 and used that to divide both the denominator and numerator.

b) Simplify these fractions in one step.

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

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

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

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

7) The fraction can be simplified.



is a prime number.



is a multiple of 10

What could each number be? 2 is prime, 20 is a multiple of 10 and $\frac{2}{20} = \frac{1}{10}$