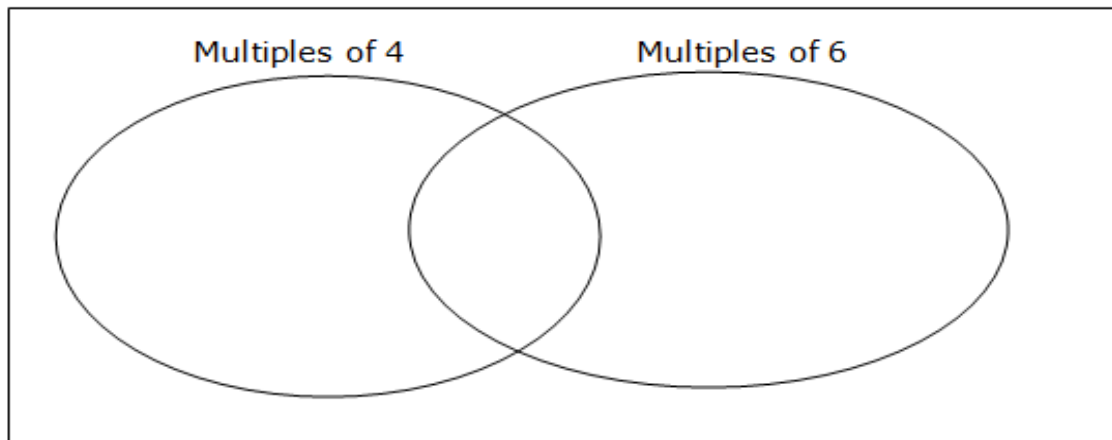


Can I find common factors and multiples of given numbers?

- a) Write all the factor pairs for the number 12
- b) Write all the factor pairs for the number 21.
- c) What are the common factors for the numbers 12 and 21?
- d) Write the common factors for the numbers 15 and 24.
- e) Is 9 a factor of 63? Why?

- f) Write the first 8 multiples of 3.
- g) Write the first 8 multiples of 7.
- h) What is the first common multiple of 3 and 7?
- i) What is the first common multiple of 4 and 6?
- j) Is 22 a multiple of 4? How do you know?

- k) Put the numbers 1-30 into the Venn diagrams. If they are multiples of both put them in the middle.



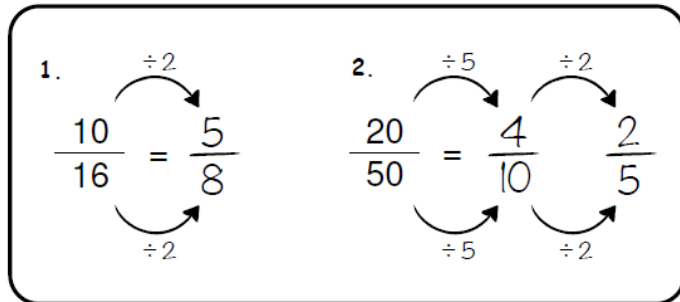
Challenge

- a) What numbers between 1 and 20 only have 2 factors (there are 8)?
e.g. 23 has only 2 factors. 1 and 23 (1x23)
- b) All multiples of 3 are odd. TRUE or FALSE? Why?

Can I simplify fractions?

Simplifying Fractions

Examples:



Simplify the following fractions in your book using the method shown above.:

1. $\frac{2}{4}$

2. $\frac{35}{40}$

3. $\frac{3}{6}$

4. $\frac{18}{20}$

5. $\frac{4}{36}$

6. $\frac{5}{35}$

Top Tips!

- 1) Find a common factor (a number they can both be divided by) of the numerator and denominator.
- 2) Divide the numerator and then the denominator by that number.
- 3) Is there a common factor for the new numerator and denominator?
Yes- repeat step 2, then step 3.
No- You've simplified it!

Challenge

Why can't fractions such as the following be simplified?

$$\frac{21}{67} \quad \frac{17}{45}$$

Explain your answer as fully as possible.

What fraction has a denominator of 30 and when it is simplified it becomes $\frac{2}{5}$?

Can I find equivalent fractions?



- a) Using the image above, how many different ways can you find of writing $1/2$?
- b) From the picture, what equivalent fractions for $1/3$ can you find?
- c) Use the image of the fraction wall to show how else could you write $3/4$?

d) Fill in the missing numbers and show how you calculated them.

$$\frac{\square}{11} = \frac{12}{44} \qquad \frac{4}{5} = \frac{12}{\square} \qquad \frac{6}{12} = \frac{24}{\square}$$

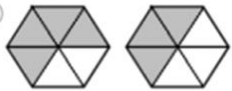
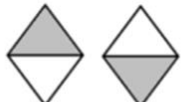
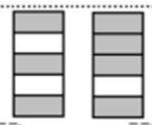
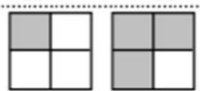
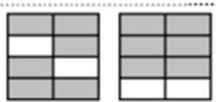
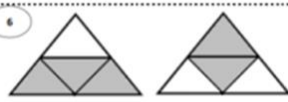
e) Which fraction is equivalent to $5/8$? Show how you know. $2/5$ $10/16$ $3/12$

Challenge

Here are some shapes made of squares.
 A fraction of each shape is shaded.
 Match each shape to its equivalent fraction.
 One has been done for you.

	$\frac{7}{10}$
	$\frac{3}{5}$
	$\frac{1}{2}$
	$\frac{4}{5}$
	$\frac{3}{10}$

Can I compare fractions?

<p>1) </p> <p><input type="text"/> <input type="text"/> <input type="text"/></p>	<p>2) </p> <p><input type="text"/> <input type="text"/> <input type="text"/></p>
<p>3) </p> <p><input type="text"/> <input type="text"/> <input type="text"/></p>	<p>4) </p> <p><input type="text"/> <input type="text"/> <input type="text"/></p>
<p>5) </p> <p><input type="text"/> <input type="text"/> <input type="text"/></p>	<p>6) </p> <p><input type="text"/> <input type="text"/> <input type="text"/></p>

- 1) $\frac{7}{8}$ $\frac{3}{10}$
- 2) $\frac{5}{10}$ $\frac{4}{8}$
- 3) $\frac{2}{3}$ $\frac{2}{8}$
- 4) $\frac{1}{2}$ $\frac{1}{2}$

Challenge

Anna says $\frac{4}{7}$ is greater than $\frac{5}{9}$

Explain why Anna is correct.

If someone is hungry and they are offered $\frac{36}{96}$ or $\frac{25}{40}$ of a huge pumpkin pie, which would they rather have?



Can I compare and order fractions?

1) $\frac{7}{8}$ $\frac{3}{10}$

$\frac{5}{2}$, $\frac{3}{2}$, $\frac{7}{2}$
 < <

2) $\frac{5}{10}$ $\frac{4}{8}$

) $\frac{8}{3}$, $\frac{5}{3}$, $\frac{1}{3}$
 < <

3) $\frac{2}{3}$ $\frac{2}{8}$

4) $\frac{1}{2}$ $\frac{1}{2}$

) $\frac{6}{7}$, $\frac{9}{7}$, $\frac{5}{7}$
 < <

$\frac{6}{5}$ $\frac{3}{5}$ $\frac{3}{4}$

Write these fractions in order, starting with the **smallest**.

 smallest

- Order the following fractions from smallest to biggest. Show your method. $\frac{2}{9}$ $\frac{1}{3}$ $\frac{4}{9}$ $\frac{2}{3}$
- Order the following fractions from smallest to biggest. Show your method. $\frac{2}{7}$ $\frac{1}{2}$ $\frac{2}{3}$ $\frac{5}{7}$

Can I compare and order fractions with no common multiple and mixed numbers?

- a) Order the following fractions from smallest to biggest. Show your method. $\frac{2}{8}$ $\frac{3}{10}$ $\frac{4}{7}$ $\frac{6}{9}$
- b) Order the following fractions- start with the biggest. Show your method. $\frac{1}{5}$ $\frac{4}{8}$ $\frac{7}{4}$ $\frac{2}{3}$
- c) Order the following mixed numbers from biggest to smallest. Show your method. $1\frac{2}{3}$ $1\frac{4}{5}$ $1\frac{5}{9}$
- d) Order the following mixed numbers from biggest to smallest. Show your method. $3\frac{1}{9}$ $\frac{3}{5}$ $\frac{12}{8}$
- e) **Here are four fraction cards.**

$$\frac{3}{4}$$

$$\frac{5}{8}$$

$$\frac{6}{12}$$

$$\frac{7}{16}$$

Use any **three** of the cards to make this correct.

$$\square$$

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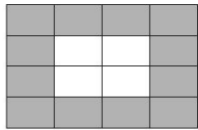
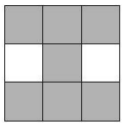
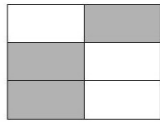
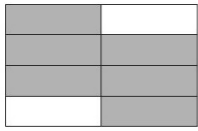
$$\square$$

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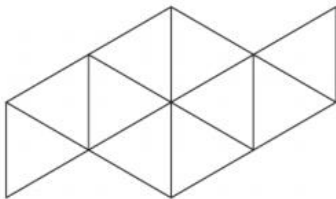
$$\square$$

Can I apply my knowledge and understanding of equivalent and ordering and comparing fractions?

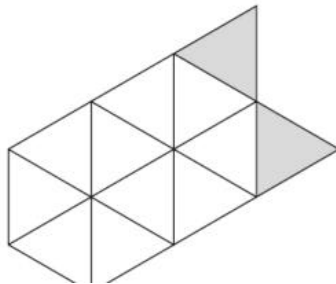
Tick two shapes that have $\frac{3}{4}$ shaded.



Shade $\frac{1}{5}$ of this shape.

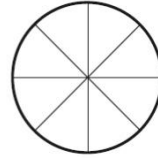
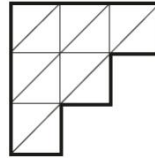
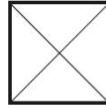


Shade **more** triangles on this shape so that it is $\frac{1}{3}$ shaded



Each diagram below is divided into equal sections.

Shade three-quarters of each diagram.



- For homework, Rosa is supposed to read $\frac{3}{4}$ of a chapter of history and $\frac{1}{3}$ of a chapter of science. Which fraction is larger?
- Roger is dividing a bag of marbles. He gives $\frac{2}{9}$ of the marbles to Pedro, $\frac{1}{3}$ to Manuel, $\frac{7}{27}$ to Marie, and he keeps $\frac{5}{27}$ for himself. What are these fractions in order from least to greatest?