

4.2.21

Fractions

Learning Objective:

We are learning to compare and order fractions greater than 1.

I will be successful if:

- I can order fractions in ascending and descending order.
- I can compare fractions using greater than, less than and equals symbols.
- I can find equivalent fractions using my multiplication facts.

Key Vocabulary

fractions as part of a whole

equal

representations

numerator

denominator

non-unit and unit fractions

ascending order

descending order

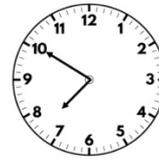
compare

greater than, less than, equal to

Flashback 4

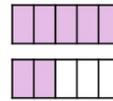
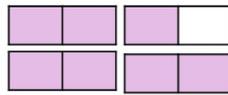
Year 5 | Week 5 | Day 4

1) $\frac{18}{4} =$ ___ wholes + ___ quarters



2) Multiply 137×14

3) $\frac{7}{2} \bigcirc \frac{7}{5}$



4) What is the remainder for 7209 divided by 6?



Challenge

5) Add 0.4, 0.7 and 1.2

6) Add 1.8, 0.6 and 0.9

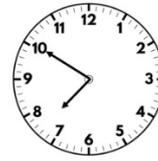
7) Add 0.3, 0.8 and 1.6

8) Add 1.23, 0.7 and 0.25

Flashback 4

Year 5 | Week 5 | Day 4

1) $\frac{19}{4} = \underline{4}$ wholes + $\underline{3}$ quarters



2) Multiply 137×14 **1,918**

3) $\frac{7}{2} > \frac{7}{5}$

4) What is the remainder for 7209 divided by 6?
remainder 3



Challenge

5) Add 0.4, 0.7 and 1.2 **2.3**

6) Add 1.8, 0.6 and 0.9 **3.3**

7) Add 0.3, 0.8 and 1.6 **2.7**

8) Add 1.23, 0.7 and 0.25 **2.18**

Yesterday, we looked at how to compare and order fractions that were less than 1, using equivalent fractions.

Use bar models to compare $\frac{5}{8}$ and $\frac{3}{4}$

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$$\frac{5}{8} \quad \frac{3}{4} = \frac{6}{8}$$

x2

Today, we will be comparing and ordering fractions that are greater than 1.

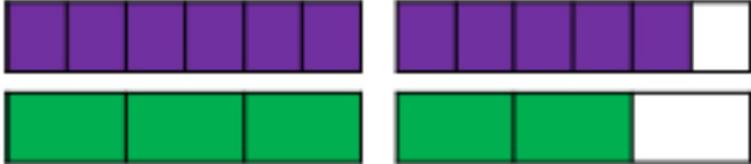
Use bar models to compare $\frac{7}{6}$ and $\frac{5}{3}$

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Which is the greatest fraction?

Use a bar model to compare $1\frac{2}{3}$ and $1\frac{5}{6}$



The image shows two rows of bar models. The top row represents $1\frac{2}{3}$ and $1\frac{5}{6}$ using purple bars. The first bar is divided into 3 equal parts, all of which are shaded purple. The second bar is divided into 6 equal parts, with 5 parts shaded purple and 1 part white. The bottom row represents the same fractions using green bars. The first bar is divided into 3 equal parts, all of which are shaded green. The second bar is divided into 6 equal parts, with 4 parts shaded green and 2 parts white.

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How does the bar model help us to see which fraction is the greatest?

Ordering fractions with different denominators.

First, we need to find equivalent fractions so that they all have the same denominator.

$$\frac{8}{5} = \frac{\quad}{20} \quad \frac{11}{10} = \frac{\quad}{20} \quad \frac{17}{20}$$

Convert the first 2 fractions to have a denominator of 20, like the third fraction.

How did I use my knowledge of multiples to help me here?

Now, order the fractions in descending order.

Largest

Smallest

First, convert these fractions to a common denominator then order them.


$$1\frac{2}{3}, 1\frac{7}{24} \text{ and } \frac{11}{12}$$

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Have a go at the questions on the sheet attached.

Reasoning challenges

Eva and Alex each have two identical pizzas.

Eva says,

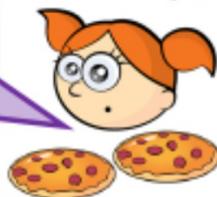


I have cut each pizza into 6 equal pieces and eaten 8



Alex says,

I have cut each pizza into 9 equal pieces and eaten 15



Who ate the most pizza?

Use a drawing to support your answer.

Dora looks at the fractions $1\frac{7}{12}$ and $1\frac{3}{4}$

She says,



$1\frac{7}{12}$ is greater than $1\frac{3}{4}$ because the numerator is larger

Do you agree?

Explain why using a model.

FRACTIONS AND DECIMALS

Year 5

Thinking Tom says:

"When comparing fractions to find the largest fraction, just look for the fraction with the smallest denominator."



What do you think?

Convince Me!

MA02718