

Homework/Extension

Step 2: Fractions on a Number Line

National Curriculum Objectives:

Mathematics Year 6: (6F2) [Use common factors to simplify fractions; use common multiples to express fractions in the same denomination](#)

Mathematics Year 6: (6F3) [Compare and order fractions, including fractions > 1](#)

Mathematics Year 6: (6F11) [Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts](#)

Differentiation:

Questions 1, 4 and 7 (Varied Fluency)

Developing Compare two fractions by placing fractions less than 1 on a number line. Denominators are direct multiples.

Expected Compare two fractions by placing them on a number line where denominators are multiples of each other. Some use of mixed numbers less than 2.

Greater Depth Compare two fractions by placing fractions on a number line where denominators are not multiples of each other and may require simplifying. Some use of mixed numbers less than 2.

Questions 2, 5 and 8 (Varied Fluency)

Developing Check number lines to support placing and comparing fractions less than one on a number line. Denominators are direct multiples.

Expected Check number lines to support placing and comparing fractions on a number line where denominators are multiples of each other. Some use of mixed numbers less than 2.

Greater Depth Check number lines to support placing and comparing fractions on a number line where denominators are not multiples of each other and may require simplifying. Some use of mixed numbers less than 2.

Questions 3, 6 and 9 (Reasoning and Problem Solving)

Developing Select the correct statement to support placing and comparing fractions less than one on a number line. Denominators are direct multiples.

Expected Select the correct statement to support placing and comparing fractions on a number line whose denominators are multiples of each other. Some use of mixed numbers less than 2.

Greater Depth Select the correct statement to support placing and comparing fractions on a number line whose denominators are not multiples of each other and may require simplifying. Some use of mixed numbers less than 2.

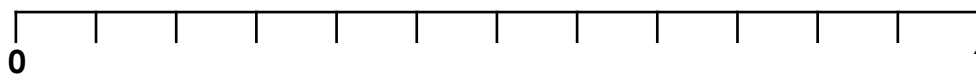
More [Year 6 Fractions](#) resources.

Did you like this resource? Don't forget to [review](#) it on our website.

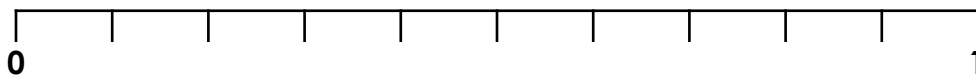
Fractions on a Number Line

1. Compare the following fractions, using the number line and the $<$, $>$ or $=$ symbols.

A. $\frac{3}{4} \bigcirc \frac{8}{12}$

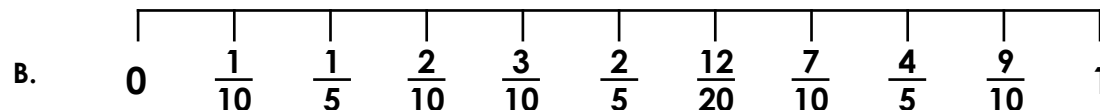
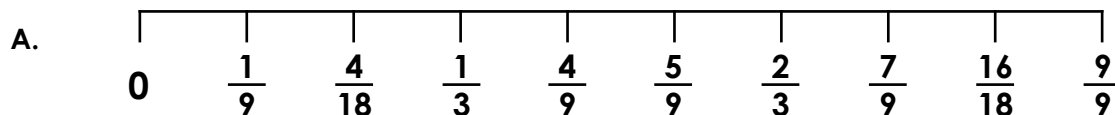


B. $\frac{3}{5} \bigcirc \frac{6}{10}$



VF
HW/Ext

2. True or false? The following number lines are correct.



VF
HW/Ext

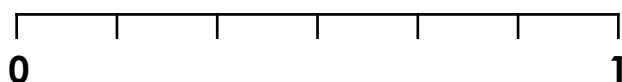
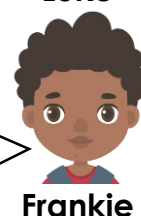
3. Frankie and Luke are discussing where to place the following fractions on a number line.

A. $\frac{1}{6}$ B. $\frac{1}{3}$

A has a larger denominator. Therefore, it is the larger fraction so it is placed further along the number line.



The numerators are the same. B is the larger fraction because the parts of the whole fraction are bigger.



Using the number line, prove who is correct.

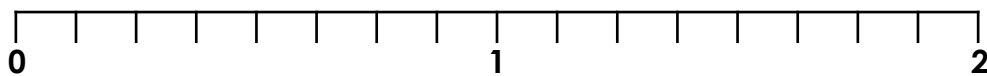


RPS
HW/Ext

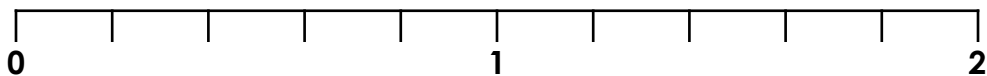
Fractions on a Number Line

4. Compare the following fractions, using the number line and the $<$, $>$ or $=$ symbols.

A. $1\frac{3}{8} \bigcirc \frac{6}{4}$

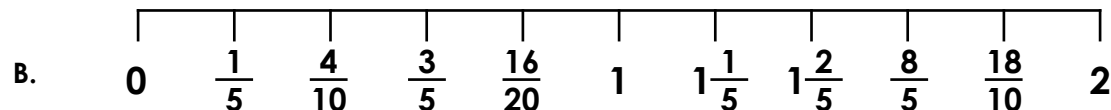
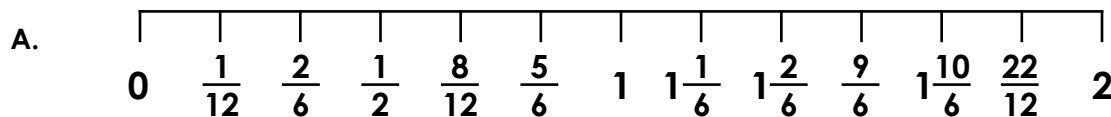


B. $1\frac{4}{5} \bigcirc \frac{18}{10}$



VF
HW/Ext

5. True or false? The following number lines are correct.



VF
HW/Ext

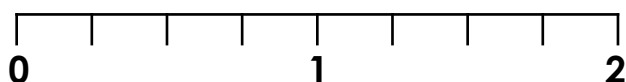
6. Olivia and Seth are discussing where to place the following fractions on a number line.

A. $\frac{15}{8}$ B. $1\frac{3}{4}$

B has a larger denominator. Therefore, it is the larger fraction so it is placed further along the number line.



A is bigger than B so they must be placed separately.



Using the number line, prove who is correct.

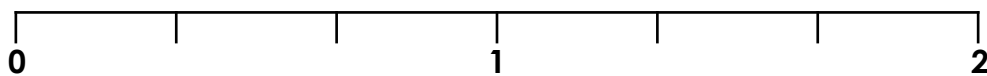


RPS
HW/Ext

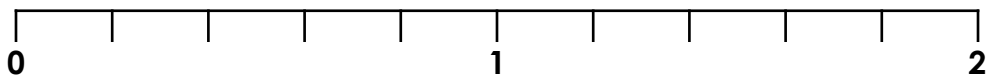
Fractions on a Number Line

7. Compare the following fractions, using the number line and the $<$, $>$ or $=$ symbols.

A. $1\frac{6}{9} \bigcirc \frac{10}{6}$

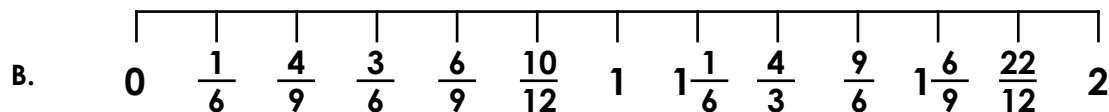
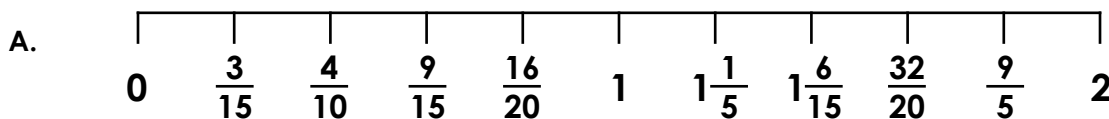


B. $1\frac{6}{15} \bigcirc \frac{16}{10}$



VF
HW/Ext

8. True or false? The following number lines are correct.



VF
HW/Ext

9. Maisie and Cayden are discussing where to place the following fractions on a number line.

A. $\frac{15}{12}$ B. $1\frac{4}{8}$

I can compare these fractions on the number line if I simplify both fractions into quarters

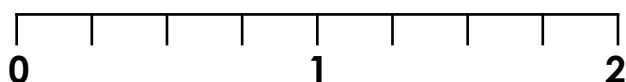


Cayden

I can not compare these fractions because 12 is not a multiple of 8.



Maisie



Using the number line, prove who is correct.



RPS
HW/Ext

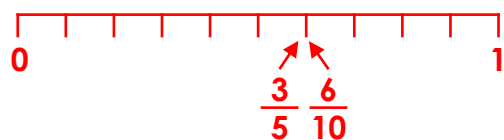
Homework/Extension Fractions on a Number Line

Developing

1. A: >

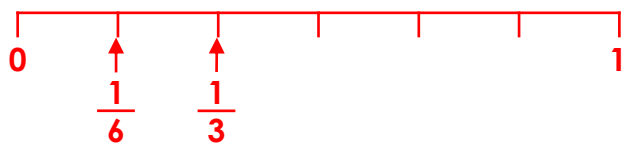


B: =



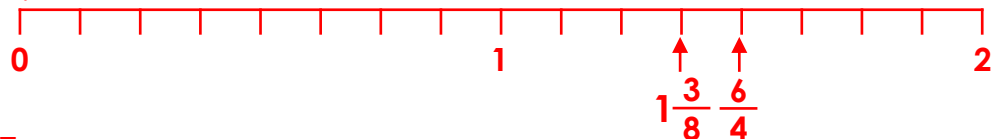
2. A – True, B – False

3. Frankie is correct. The whole has been divided into three large parts, rather than six small parts.

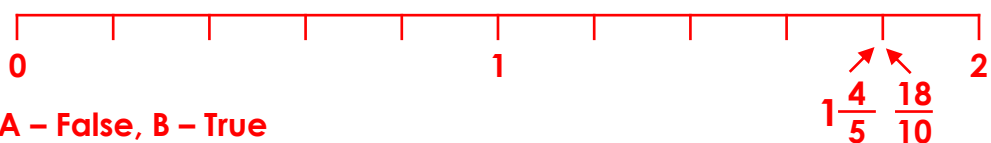


Expected

4. A: <

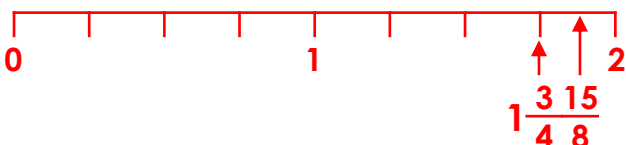


B: =



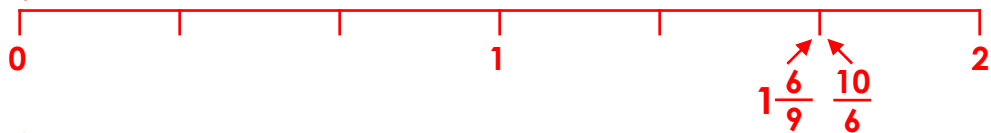
5. A – False, B – True

6. Olivia is correct.

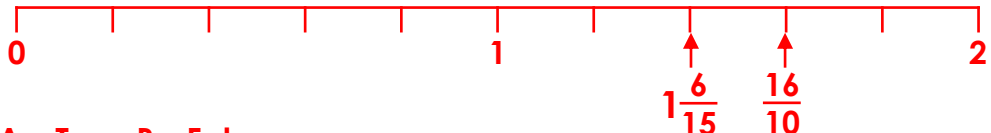


Greater Depth

7. A: =



B: <



8. A – True, B - False

9. Cayden is correct. Both fractions can be simplified.

