Which is bigger?

Teacher notes

Why use this resource?

Students are presented with pairs of fractions and asked to decide which is bigger. It starts with numerical fractions in the warm-up and moves on to algebraic fractions that will require students to appreciate the significance of variables in an algebraic expression. This resource could be used to develop graph drawing skills and an appreciation of how and when a sketch-graph is useful to interpret a problem, as well as encouraging students to think about inequalities.

Possible approach

It would be nice if students could work together on this problem to encourage mathematical discussion and to highlight the multiple approaches that they may take to justify their decisions.

Possible extension

Students are challenged to come up with their own pairs of fractions that satisfy the conditions given in the **Taking it further** section.

A version of this resource has been featured on the NRICH website. You might like to look at some students' solutions that have been submitted there.

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