

Comparing Fractions

We can compare fractions using $<$, $>$ and $=$.

Rule 1: If the denominators of the two fractions are the same, the fraction with the larger numerator is greater.

E.g $\frac{7}{9} \quad (\quad) \quad \frac{4}{9}$

Both have the same denominator, so we compare the numerators. Since $7 > 4$ our answer is

$$\frac{7}{9} \quad (>) \quad \frac{4}{9}$$

Compare the following fractions using $<$, $>$ and $=$

a) $\frac{5}{7} \quad \frac{2}{7}$

b) $\frac{1}{3} \quad \frac{2}{3}$

c) $\frac{1}{4} \quad \frac{3}{4}$

d) $\frac{7}{8} \quad \frac{5}{8}$

e) $\frac{3}{5} \quad \frac{4}{5}$

f) $\frac{1}{6} \quad \frac{4}{6}$

Rule 2: When comparing fractions with different denominators we must first form equivalent fractions using the Lowest Common Multiple (LCM), before we compare the numerators.

E.g $\frac{4}{7} \quad (\quad) \quad \frac{4}{5}$

The LCM of 5 and 7 is 35

$$\frac{4}{7} \quad (\quad) \quad \frac{4}{5}$$

(Note: In the original image, red annotations show the conversion process: $\frac{4}{7} \times \frac{5}{5} = \frac{20}{35}$ and $\frac{4}{5} \times \frac{7}{7} = \frac{28}{35}$)

$$\frac{20}{35} \quad (<) \quad \frac{28}{35}$$

once you have your equivalent fractions, compare the numerators.

Fill in the blanks with $<$, $>$ and $=$. Watch the video to help you.

g) $\frac{1}{2}$ $\frac{1}{3}$

h) $\frac{1}{8}$ $\frac{1}{6}$

i) $\frac{1}{6}$ $\frac{1}{5}$

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

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

l) $\frac{4}{5}$ $\frac{1}{6}$

m) $\frac{3}{12}$ $\frac{1}{4}$

n) $\frac{2}{5}$ $\frac{2}{3}$

o) $\frac{5}{8}$ $\frac{3}{4}$

p) $\frac{3}{4}$ $\frac{2}{6}$

q) $\frac{5}{8}$ $\frac{4}{6}$