TARGET To compare fractions with different denominators.
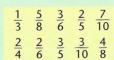
To compare two fractions with different denominators convert one or both so that they have the same denominator.

Examples   Which is larger, $\frac{1}{2}$ or $\frac{3}{8}$?

$\frac{1}{2} = \frac{4}{8}$

$\frac{1}{2}$ is larger than $\frac{3}{8}$.

Which is larger, $\frac{1}{2}$ or $\frac{3}{5}$?

$\frac{1}{2} = \frac{5}{10}$ $\frac{3}{5} = \frac{6}{10}$

$\frac{3}{5}$ is larger than $\frac{1}{2}$.

A

1

$\frac{1}{3}$	$\frac{5}{8}$	$\frac{3}{6}$	$\frac{2}{5}$	$\frac{7}{10}$
$\frac{2}{4}$	$\frac{2}{6}$	$\frac{3}{5}$	$\frac{3}{10}$	$\frac{4}{8}$

Which of the fractions in the box are:
a) equal to one half
b) less than one half
c) greater than one half?

Which fraction is larger?

2 $\frac{1}{3}$ or $\frac{1}{4}$

3 $\frac{1}{8}$ or $\frac{1}{2}$

4 $\frac{3}{10}$ or $\frac{4}{10}$

5 $\frac{1}{6}$ or $\frac{1}{7}$

6 $\frac{6}{11}$ or $\frac{4}{11}$

7 $\frac{2}{9}$ or $\frac{2}{3}$

8 $\frac{3}{4}$ or $\frac{3}{5}$

Write each group of fractions in order of size, smallest first.

9 $\frac{1}{5}$ $\frac{1}{8}$ $\frac{1}{3}$

10 $\frac{4}{5}$ $\frac{4}{11}$ $\frac{4}{7}$

11 $\frac{1}{6}$ $\frac{1}{4}$ $\frac{1}{10}$

12 $\frac{7}{10}$ $\frac{7}{12}$ $\frac{7}{8}$

B

For each of the following pairs of numbers:
a) list the first 12 multiples of each number
b) write down the common multiples
c) write down the lowest common multiple.

1 2 and 5

2 3 and 4

3 5 and 3

4 4 and 7

Copy and complete to find the larger fraction.

5 $\frac{1}{2}$ or $\frac{3}{8} \rightarrow \frac{\square}{8}$ or $\frac{3}{8}$

☐ is larger.

6 $\frac{3}{5}$ or $\frac{7}{10} \rightarrow \frac{\square}{10}$ or $\frac{7}{10}$

☐ is larger.

7 $\frac{5}{6}$ or $\frac{2}{3} \rightarrow \frac{5}{6}$ or $\frac{\square}{6}$

☐ is larger.

8 $\frac{7}{12}$ or $\frac{3}{4} \rightarrow \frac{7}{12}$ or $\frac{\square}{12}$

☐ is larger.

9 $\frac{2}{3}$ or $\frac{3}{4} \rightarrow \frac{\square}{12}$ or $\frac{\square}{12}$

☐ is larger.

C

Copy and complete to find the larger fraction.

1 $\frac{9}{10}$ or $\frac{89}{100} \rightarrow \frac{\square}{100}$ or $\frac{89}{100}$

☐ is larger.

2 $\frac{3}{4}$ or $\frac{5}{6} \rightarrow \frac{\square}{12}$ or $\frac{\square}{12}$

☐ is larger.

3 $\frac{4}{10}$ or $\frac{5}{12} \rightarrow \frac{\square}{60}$ or $\frac{\square}{60}$

☐ is larger.

4 $\frac{5}{8}$ or $\frac{7}{12} \rightarrow \frac{\square}{48}$ or $\frac{\square}{48}$

☐ is larger.

5 $\frac{3}{5}$ or $\frac{4}{6} \rightarrow \frac{\square}{\square}$ or $\frac{\square}{\square}$

6 $\frac{1}{4}$ or $\frac{2}{7} \rightarrow \frac{\square}{\square}$ or $\frac{\square}{\square}$

7 $\frac{1}{3}$ or $\frac{2}{5} \rightarrow \frac{\square}{\square}$ or $\frac{\square}{\square}$

8 $\frac{2}{6}$ or $\frac{3}{8} \rightarrow \frac{\square}{\square}$ or $\frac{\square}{\square}$

9 $\frac{2}{3}$ or $\frac{7}{10} \rightarrow \frac{\square}{\square}$ or $\frac{\square}{\square}$

10 $\frac{2}{5}$ or $\frac{3}{8} \rightarrow \frac{\square}{\square}$ or $\frac{\square}{\square}$

TARGET To compare and order fractions with different denominators.

To order fractions with different denominators convert one or more so that they have the same denominator.

Example

Write in order smallest first, $\frac{1}{2}, \frac{3}{10}, \frac{2}{5}$.

$\frac{1}{2} = \frac{5}{10}$ $\frac{2}{5} = \frac{4}{10}$ Answer $\frac{3}{10}, \frac{2}{5}, \frac{1}{2}$

A

Which fraction is larger?

1 $\frac{3}{5}$ or $\frac{4}{5}$

2 $\frac{2}{3}$ or $\frac{2}{7}$

3 $\frac{8}{10}$ or $\frac{7}{10}$

4 $\frac{5}{12}$ or $\frac{5}{9}$

5 $\frac{4}{9}$ or $\frac{4}{6}$

6 $\frac{3}{8}$ or $\frac{3}{11}$

7 $\frac{5}{7}$ or $\frac{6}{7}$

8 $\frac{6}{11}$ or $\frac{6}{12}$

Copy and complete to find the larger fraction.

9 $\frac{1}{2}$ or $\frac{5}{12} \rightarrow \frac{\square}{12}$ or $\frac{5}{12}$

☐ is larger.

10 $\frac{4}{5}$ or $\frac{9}{10} \rightarrow \frac{\square}{10}$ or $\frac{9}{10}$

☐ is larger.

11 $\frac{3}{4}$ or $\frac{5}{8} \rightarrow \frac{\square}{8}$ or $\frac{5}{8}$

☐ is larger.

12 $\frac{1}{2}$ or $\frac{4}{10} \rightarrow \frac{\square}{10}$ or $\frac{4}{10}$

☐ is larger.

13 $\frac{1}{3}$ or $\frac{1}{6} \rightarrow \frac{\square}{6}$ or $\frac{1}{6}$

☐ is larger.

14 $\frac{2}{3}$ or $\frac{7}{9} \rightarrow \frac{\square}{9}$ or $\frac{7}{9}$

☐ is larger.

B

To find the larger fraction convert one of each pair so that they share a common denominator.

1 $\frac{5}{6}$ or $\frac{11}{12}$

2 $\frac{1}{3}$ or $\frac{3}{12}$

3 $\frac{5}{10}$ or $\frac{51}{100}$

4 $\frac{2}{5}$ or $\frac{3}{10}$

5 $\frac{1}{2}$ or $\frac{5}{8}$

6 $\frac{3}{4}$ or $\frac{8}{12}$

To find the larger fraction convert both fractions so that they share a common denominator.

7 $\frac{2}{3}$ or $\frac{4}{5}$

8 $\frac{1}{4}$ or $\frac{2}{6}$

9 $\frac{3}{5}$ or $\frac{7}{12}$

10 $\frac{4}{6}$ or $\frac{5}{9}$

11 $\frac{1}{2}$ or $\frac{4}{7}$

12 $\frac{3}{8}$ or $\frac{5}{12}$

Write these fractions in order, smallest first.

13 $\frac{1}{2}, \frac{3}{8}, \frac{1}{4}, \frac{1}{8}$

14 $\frac{2}{3}, \frac{1}{6}, \frac{1}{3}, \frac{1}{2}$

15 $\frac{2}{5}, \frac{3}{5}, \frac{1}{2}, \frac{3}{10}$

16 $\frac{3}{4}, \frac{3}{8}, \frac{7}{12}, \frac{1}{2}$

17 $\frac{5}{6}, \frac{1}{2}, \frac{2}{3}, \frac{5}{12}$

18 $\frac{3}{4}, \frac{4}{5}, \frac{1}{2}, \frac{6}{10}$

C

Write the larger fraction.

1 $\frac{5}{6}, \frac{7}{10}$

2 $\frac{4}{5}, \frac{9}{11}$

3 $\frac{1}{4}, \frac{2}{9}$

4 $\frac{4}{7}, \frac{7}{12}$

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

6 $\frac{4}{9}, \frac{5}{12}$

7 $\frac{2}{3}, \frac{5}{8}$

8 $\frac{5}{7}, \frac{7}{9}$

Write in ascending order.

9 $\frac{5}{6}, \frac{2}{3}, \frac{7}{9}, \frac{7}{12}$

10 $\frac{3}{5}, \frac{1}{2}, \frac{7}{10}, \frac{55}{100}$

11 $\frac{1}{2}, \frac{5}{8}, \frac{7}{16}, \frac{3}{4}$

12 $\frac{3}{4}, \frac{8}{12}, \frac{5}{6}, \frac{4}{5}$

Find the fraction which is halfway between each pair of numbers.

13 $\frac{1}{2}$ and $\frac{3}{4}$

14 $\frac{1}{5}$ and $\frac{2}{5}$

15 $\frac{1}{6}$ and $\frac{1}{3}$

16 $\frac{5}{8}$ and $\frac{3}{4}$

17 $\frac{7}{12}$ and $\frac{2}{3}$

18 $\frac{1}{2}$ and $\frac{5}{8}$

19 $\frac{4}{5}$ and $\frac{9}{10}$

20 $\frac{1}{3}$ and $\frac{1}{2}$