

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

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

$$\frac{2}{5} = \frac{4}{10}$$

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

A

Which fraction is larger?

- | | |
|------------------------------------|------------------------------------|
| 1 $\frac{3}{5}$ or $\frac{4}{5}$ | 5 $\frac{4}{9}$ or $\frac{4}{6}$ |
| 2 $\frac{2}{3}$ or $\frac{2}{7}$ | 6 $\frac{3}{8}$ or $\frac{3}{11}$ |
| 3 $\frac{8}{10}$ or $\frac{7}{10}$ | 7 $\frac{5}{7}$ or $\frac{6}{7}$ |
| 4 $\frac{5}{12}$ or $\frac{5}{9}$ | 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 $\frac{11}{12}$ | 4 $\frac{2}{5}$ or $\frac{3}{10}$ |
| 2 $\frac{1}{3}$ or $\frac{3}{12}$ | 5 $\frac{1}{2}$ or $\frac{5}{8}$ |
| 3 $\frac{5}{10}$ or $\frac{51}{100}$ | 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 $\frac{4}{5}$ | 10 $\frac{4}{6}$ or $\frac{5}{9}$ |
| 8 $\frac{1}{4}$ or $\frac{2}{6}$ | 11 $\frac{1}{2}$ or $\frac{4}{7}$ |
| 9 $\frac{3}{5}$ or $\frac{7}{12}$ | 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 $\frac{5}{6}, \frac{7}{10}$ | 5 $\frac{3}{4}, \frac{4}{5}$ |
| 2 $\frac{4}{5}, \frac{9}{11}$ | 6 $\frac{4}{9}, \frac{5}{12}$ |
| 3 $\frac{1}{4}, \frac{2}{9}$ | 7 $\frac{2}{3}, \frac{5}{8}$ |
| 4 $\frac{4}{7}, \frac{7}{12}$ | 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 $\frac{1}{2}$ |

C

- 1 49, 144
2 9, 100 or 25, 36
3 9, 36
4 64, 100
5 5, 7
6 11, 13
7 2, 29
8 2, 31
9 14, 15
- 10 18, 19
11 26, 27
12 30, 31
13 3, 4, 5
14 5, 6, 7
15 8, 9, 10
16 13, 14, 15
17 101, 103, 107, 109, 113

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A

- 1 $\frac{2}{3}, \frac{4}{6}$
2 $\frac{1}{5}, \frac{5}{10}$
3 $\frac{1}{4}, \frac{8}{32}$
4 $\frac{1}{3}, \frac{9}{27}$
5 $\frac{5}{6}, \frac{10}{12}$
6 $\frac{7}{10}, \frac{70}{100}$
7 $\frac{1}{2}, \frac{3}{6}$
8 $\frac{9}{4}, \frac{9}{12}$

B

- 1 $\frac{3}{6}$
2 $\frac{9}{12}$
3 $\frac{3}{9}$
4 $\frac{30}{100}$
5 $\frac{6}{12}$
6 $\frac{2}{8}$
7 $\frac{2}{10}$
8 $\frac{8}{12}$
9 $\frac{4}{12}$
10 $\frac{2}{6}$
11 $\frac{50}{100}$
12 $\frac{8}{8}$
13 $\frac{8}{10}$
14 $\frac{6}{9}$
15 $\frac{3}{12}$
16 $\frac{10}{12}$
17 $\frac{3}{8}$
18 $\frac{2}{3}$
19 $\frac{8}{12}$
20 $\frac{9}{12}$

C

- 1 $\frac{10}{16}$
2 $\frac{15}{20}$
3 $\frac{4}{14}$
4 $\frac{70}{100}$
5 $\frac{8}{18}$
6 $\frac{30}{50}$
7 $\frac{10}{16}$
8 $\frac{80}{100}$
9 $\frac{1}{4}$
10 $\frac{2}{3}$
11 $\frac{3}{5}$
12 $\frac{1}{2}$
13 $\frac{11}{20}$
14 $\frac{1}{5}$
15 $\frac{7}{6}$
16 $\frac{9}{10}$
17 $\frac{4}{10}$
18 $\frac{20}{24}$
19 $\frac{6}{60}$
20 $\frac{8}{12}$

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A

- 1 a) $\frac{3}{6}, \frac{2}{4}, \frac{4}{8}$
b) $\frac{1}{3}, \frac{2}{5}, \frac{2}{6}, \frac{3}{10}$
c) $\frac{5}{8}, \frac{7}{10}, \frac{3}{5}$
2 $\frac{1}{3}$
3 $\frac{1}{2}$
4 $\frac{4}{10}$
5 $\frac{1}{6}$
6 $\frac{6}{11}$
7 $\frac{2}{3}$
8 $\frac{3}{4}$
9 $\frac{1}{8}, \frac{1}{5}, \frac{1}{3}$
10 $\frac{4}{11}, \frac{4}{7}, \frac{4}{5}$
11 $\frac{1}{10}, \frac{1}{6}, \frac{4}{4}$
12 $\frac{7}{12}, \frac{7}{10}, \frac{8}{8}$

B

- 1 b) 10, 20
c) 10
2 b) 12, 24, 36
c) 12
3 b) 15, 30
c) 15
4 b) 28
c) 28
5 $\frac{1}{2}$
6 $\frac{7}{10}$
7 $\frac{5}{6}$
8 $\frac{3}{4}$
9 $\frac{3}{4}$

C

- 1 $\frac{9}{10}$
2 $\frac{5}{6}$
3 $\frac{5}{12}$
4 $\frac{5}{8}$
5 $\frac{4}{6}$
6 $\frac{2}{7}$
7 $\frac{2}{5}$
8 $\frac{3}{8}$
9 $\frac{7}{10}$
10 $\frac{2}{5}$

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A

- 1 $\frac{4}{5}$
2 $\frac{2}{3}$
3 $\frac{8}{10}$
4 $\frac{6}{9}$
5 $\frac{4}{6}$
6 $\frac{3}{8}$
7 $\frac{6}{7}$
8 $\frac{6}{11}$
9 $\frac{1}{2}$
10 $\frac{9}{10}$
11 $\frac{3}{4}$
12 $\frac{1}{2}$
13 $\frac{1}{3}$
14 $\frac{7}{9}$

B

- 1 $\frac{11}{12}$
2 $\frac{1}{2}$
3 $\frac{51}{100}$
4 $\frac{2}{5}$
5 $\frac{5}{8}$
6 $\frac{3}{4}$
7 $\frac{4}{6}$
8 $\frac{2}{3}$
9 $\frac{3}{5}$
10 $\frac{4}{6}$
11 $\frac{4}{7}$
12 $\frac{5}{12}$
13 $\frac{1}{18}, \frac{3}{4}, \frac{1}{2}$
14 $\frac{1}{6}, \frac{1}{3}, \frac{1}{2}, \frac{3}{2}$
15 $\frac{3}{10}, \frac{2}{5}, \frac{1}{3}, \frac{2}{3}$
16 $\frac{3}{8}, \frac{1}{2}, \frac{7}{12}, \frac{3}{4}$
17 $\frac{5}{12}, \frac{1}{2}, \frac{2}{3}, \frac{5}{6}$
18 $\frac{1}{2}, \frac{6}{10}, \frac{3}{4}, \frac{5}{5}$

C

- 1 $\frac{5}{6}$
2 $\frac{9}{11}$
3 $\frac{1}{4}$
4 $\frac{7}{12}$
5 $\frac{4}{5}$
6 $\frac{4}{9}$
7 $\frac{2}{3}$
8 $\frac{7}{9}$
9 $\frac{7}{12}, \frac{3}{3}, \frac{7}{6}, \frac{5}{6}$
10 $\frac{1}{2}, \frac{55}{100}, \frac{3}{5}, \frac{7}{10}$
11 $\frac{7}{16}, \frac{1}{2}, \frac{3}{8}, \frac{3}{4}$
12 $\frac{8}{12}, \frac{3}{4}, \frac{5}{6}$
13 $\frac{5}{8}$
14 $\frac{3}{10}$

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A

- 1 $\frac{5}{5}$
2 $\frac{2}{2}$
3 $\frac{10}{10}$
4 $\frac{7}{7}$
5 3
6 8
7 4
8 9
9 $1\frac{2}{4}, 1\frac{3}{4}, 2, 2\frac{1}{4}$
10 $3, 3\frac{1}{2}, 4, 4\frac{1}{2}$
11 $2, 2\frac{1}{3}, 2\frac{2}{3}, 3$
12 $\frac{6}{8}, \frac{7}{8}, 1, 1\frac{1}{8}$

B

- 1 a) $\frac{7}{5}$
2 a) $\frac{2}{5}$
3 a) $\frac{13}{3}$
4 a) $\frac{15}{4}$
5 a) $\frac{11}{6}$
6 a) $\frac{11}{3}$
7 a) $\frac{19}{8}$
8 a) $\frac{22}{5}$
b) $2\frac{1}{3}$
b) $1\frac{4}{5}$
b) $4\frac{1}{3}$
b) $3\frac{3}{4}$
b) $1\frac{5}{6}$
b) $3\frac{2}{3}$
b) $2\frac{3}{8}$
b) $4\frac{2}{5}$
9 $1\frac{3}{4}$
10 $2\frac{1}{2}$
11 $1\frac{7}{10}$
12 $1\frac{3}{5}$
13 $2\frac{1}{3}$
14 $1\frac{7}{8}$
15 $1\frac{1}{6}$
16 $2\frac{1}{4}$

C

- 1 $3\frac{1}{2}$
2 $4\frac{1}{5}$
3 $2\frac{9}{10}$
4 $1\frac{5}{8}$
5 $7\frac{1}{4}$
6 $9\frac{1}{6}$
7 $3\frac{46}{100}$
8 $4\frac{5}{12}$
9 $\frac{15}{4}$
10 $\frac{57}{10}$
11 $\frac{33}{5}$
12 $\frac{219}{100}$
13 29
14 31
15 59
16 46
17 $1\frac{2}{7}, 1\frac{4}{7}, 1\frac{6}{7}, 2\frac{1}{7}$
18 $\frac{5}{6}, 1, 1\frac{1}{6}, 1\frac{2}{3}$
19 $\frac{9}{10}, 1\frac{1}{10}, 1\frac{3}{10}, 1\frac{5}{10}$
20 $1, 1\frac{2}{9}, 1\frac{4}{9}, 1\frac{6}{9}$