

Key

2.5 Comparing and Ordering Fractions

MATHPOWER™ Seven, pp. 50–51

To compare fractions with a common denominator, compare the numerators.

To compare fractions with different denominators, write the equivalent fractions with a common denominator, then compare numerators.

$$\frac{1}{7} < \frac{6}{7} \text{ because } 1 < 6$$

$$2\frac{3}{4} > 2\frac{3}{5} \text{ because } 2\frac{15}{20} > 2\frac{12}{20}$$

Which fraction is larger?

1. $\frac{2}{7}$ vs $\frac{5}{7}$ 2. $\frac{4}{9}$ vs $\frac{8}{9}$ 3. $\frac{3}{8}$ vs $\frac{5}{8}$

Write each pair of fractions with their lowest common denominator. Circle the larger fraction in each pair.

4. $\frac{1}{4}, \frac{1}{12}$ 5. $\frac{5}{6}, \frac{3}{5}$ (2) 6. $\frac{2}{7}, \frac{2}{3}$

7. $\frac{3}{4}, \frac{1}{5}$ 8. $\frac{9}{10}, \frac{8}{9}$ 9. $\frac{6}{7}, \frac{9}{11}$ (2)

Insert > or < between each pair of fractions.

10. $\frac{3}{4} \square \frac{2}{3}$ 11. $\frac{5}{9} \square \frac{5}{6}$ 12. $\frac{5}{12} \square \frac{3}{5}$

13. $2\frac{1}{2} \square \frac{5}{4}$ 14. $\frac{11}{3} \square 3\frac{3}{4}$ 15. $\frac{31}{8} \square 3\frac{5}{6}$

Rewrite each set of fractions in order from smallest to largest.

16. $\frac{2}{3}, \frac{1}{4}, \frac{5}{6}, \frac{7}{12}$ $\frac{1}{4}, \frac{7}{12}, \frac{2}{3}, \frac{5}{6}$

17. $\frac{9}{4}, 1\frac{5}{8}, 1\frac{1}{6}, \frac{17}{12}$ $\frac{1}{6}, \frac{17}{12}, 1\frac{5}{8}, \frac{9}{4}$

Rewrite each set of fractions from largest to smallest.

18. $1\frac{3}{10}, \frac{11}{20}, \frac{1}{4}, \frac{7}{5}, 1\frac{3}{4}$ or $\frac{35}{20}, \frac{28}{20}, \frac{26}{20}, \frac{11}{20}, \frac{5}{20}$

19. $2\frac{1}{5}, \frac{9}{10}, 3\frac{1}{3}, \frac{9}{5}, \frac{2}{15}$ $3\frac{1}{3}, 2\frac{1}{5}, \frac{9}{5}, \frac{9}{10}, \frac{2}{15}$

Use the numerators and denominators listed in the boxes to complete questions 20–22.

Numerators		
2	8	11
15	4	

Denominators		
9	17	12
5	7	

20. Write 5 fractions, each with a value less than 1.

21. Rewrite the fractions from question 20 in order from smallest to largest.

22. Write 5 fractions, each with a value between 1 and 3.

23. Rewrite the fractions from question 22 in order from smallest to largest.