

Exercise 4 (answers on page 41)

Add or subtract the following fractions. Simplify and reduce when possible.

1) $\frac{2}{7} + \frac{3}{7} =$

2) $\frac{9}{14} + \frac{1}{14} =$

3) $\frac{1}{6} + \frac{3}{6} =$

4) $\frac{3}{5} + \frac{1}{4} =$

5) $\frac{2}{3} + \frac{1}{2} =$

6) $\frac{4}{5} + \frac{1}{2} =$

7) $\frac{2}{4} + \frac{3}{6} =$

8) $\frac{5}{6} + \frac{3}{8} =$

9) $\frac{7}{9} + \frac{2}{3} =$

10) $\frac{3}{4} - \frac{1}{2} =$

11) $\frac{3}{5} - \frac{1}{3} =$

12) $\frac{7}{8} - \frac{2}{3} =$

13) $\frac{5}{12} - \frac{1}{4} =$

14) $\frac{9}{11} - \frac{1}{2} =$

15) $\frac{11}{12} - \frac{5}{6} =$

16) $\frac{1}{2} - \frac{1}{3} =$

17) $\frac{5}{6} - \frac{1}{4} =$

18) $\frac{9}{10} - \frac{1}{3} =$

19) $\frac{8}{20} + \frac{1}{5} =$

20) $\frac{14}{15} - \frac{1}{6} =$

21) $\frac{4}{7} - \frac{3}{8} =$

22) $\frac{6}{12} + \frac{1}{2} =$

23) $\frac{8}{9} - \frac{2}{3} =$

24) $\frac{12}{16} + \frac{5}{8} =$

25) $\frac{3}{7} - \frac{1}{6} =$

26) $\frac{4}{5} - \frac{6}{10} =$

27) $\frac{2}{13} + \frac{2}{3} =$

Exercise 5 (answers on page 41)

Add or subtract the following mixed numbers. Simplify and reduce when possible.

1) $8\frac{4}{5} + 8\frac{1}{10} =$

2) $1\frac{2}{3} + \frac{3}{7} =$

3) $16\frac{5}{8} + \frac{11}{12} =$

4) $3\frac{4}{5} + 6\frac{2}{3} + 5\frac{11}{15} =$

5) $1\frac{11}{12} - \frac{2}{3} =$

6) $4\frac{1}{8} - 1 =$

7) $5\frac{1}{6} - 2\frac{1}{3} =$

8) $14\frac{1}{2} - 2\frac{1}{8} =$

9) $7\frac{2}{5} + 1\frac{1}{5} =$

10) $2\frac{2}{3} - \frac{1}{4} =$

11) $12\frac{1}{7} - 8\frac{2}{3} =$

12) $4\frac{4}{7} - 3\frac{6}{7} =$

13) $16\frac{5}{6} - 2\frac{1}{3} =$

14) $14 - 2\frac{1}{9} =$

15) $146 + 8\frac{1}{5} =$

16) $5\frac{5}{6} + \frac{10}{12} =$

17) $6 - 4\frac{7}{8} =$

18) $11\frac{3}{5} - 5 =$

19) $\frac{2}{3} + 7 =$

20) $2\frac{4}{8} + 1\frac{2}{3} =$

21) $100 - 4\frac{3}{8} =$

Exercise 1 (answers on page 40)

Multiply these fractions. Cancel and simplify if possible.

1. $\frac{1}{8} \times \frac{2}{3} =$

2. $\frac{1}{2} \times \frac{4}{5} =$

3. $\frac{3}{5} \times \frac{10}{11} =$

4. $\frac{8}{9} \times \frac{3}{4} =$

5. $\frac{7}{10} \times \frac{2}{21} =$

6. $\frac{3}{4} \times \frac{5}{7} =$

7. $\frac{5}{9} \times \frac{7}{8} =$

8. $6 \times \frac{1}{3} =$

9. $\frac{5}{9} \times 9 =$

10. $10 \times \frac{1}{2} =$

11. $\frac{1}{3} \times 12 =$

12. $\frac{15}{16} \times \frac{8}{10} =$

13. $\frac{7}{8} \times \frac{12}{13} =$

14. $\frac{6}{9} \times \frac{1}{3} =$

15. $\frac{5}{10} \times \frac{3}{4} =$

16. $\frac{16}{17} \times \frac{23}{24} =$

17. $\frac{5}{16} \times \frac{20}{30} =$

18. $\frac{9}{10} \times \frac{50}{100} =$

Dividing Fractions

When dividing fractions, invert (turn over) the fraction to the right of the \div ("divide by") symbol. Cancel (if possible) then multiply.

$$\text{Ex. 1: } \frac{1}{2} \div \frac{3}{4} = \frac{1}{2} \times \frac{4}{3} = \frac{2}{3}$$

$$\text{Ex. 2: } \frac{3}{5} \div 5 = \frac{3}{5} \div \frac{5}{1} = \frac{3}{5} \times \frac{1}{5} = \frac{3}{25}$$

Exercise 3 (answers on page 40)

Divide these fractions. Cancel if necessary and simplify

$$1. \frac{2}{3} \div \frac{5}{6} =$$

$$2. \frac{9}{10} \div \frac{1}{2} =$$

$$3. \frac{3}{4} \div \frac{1}{4} =$$

$$4. \frac{9}{11} \div \frac{7}{22} =$$

$$5. \frac{2}{5} \div \frac{1}{6} =$$

$$6. \frac{1}{2} \div \frac{3}{4} =$$

$$7. \frac{7}{8} \div \frac{1}{4} =$$

$$8. \frac{1}{5} \div \frac{1}{6} =$$

$$9. \frac{5}{8} \div \frac{15}{16} =$$

$$10. \frac{15}{16} \div \frac{5}{8} =$$

$$11. \frac{7}{12} \div \frac{3}{4} =$$

$$12. \frac{8}{9} \div \frac{9}{8} =$$

$$13. 2 \div \frac{3}{8} =$$

$$14. 6 \div \frac{1}{2} =$$

$$15. \frac{3}{4} \div 4 =$$