

Adding and Subtracting Fractions Homework

Work out the answer to each question, showing all your working. Remember to simplify your answers.

1.

a. $\frac{1}{5} + \frac{2}{5}$

b. $\frac{3}{8} + \frac{1}{8}$

c. $\frac{7}{10} - \frac{3}{10}$

d. $\frac{8}{9} - \frac{2}{9}$

e. $\frac{2}{7} + \frac{5}{7}$

2.

a. $\frac{2}{5} + \frac{1}{10}$

b. $\frac{3}{4} + \frac{1}{8}$

c. $\frac{7}{9} - \frac{2}{3}$

d. $\frac{5}{6} - \frac{1}{2}$

e. $\frac{1}{2} + \frac{3}{10}$

3.

a. $\frac{1}{3} + \frac{2}{5}$

b. $\frac{3}{4} - \frac{1}{6}$

c. $\frac{4}{7} + \frac{2}{3}$

d. $\frac{5}{6} - \frac{3}{5}$

e. $\frac{4}{9} + \frac{1}{4}$

4.

a. $1\frac{2}{5} + 3\frac{1}{4}$

b. $2\frac{1}{3} + 4\frac{2}{7}$




c. $5\frac{3}{4} - 1\frac{2}{7}$

d. $4\frac{3}{8} - 3\frac{2}{9}$

e. $5\frac{6}{7} + 2\frac{3}{5}$

Challenge

Write as a single fraction $\frac{2x}{7} + \frac{5}{4x}$

| WWW | Adding and Subtracting Fractions |  |  |  |
|-----------|---|---|---|---|
| 1 | Adding and subtracting with the same denominator. | | | |
| 2 | Adding and subtracting with different denominators. | | | |
| 3 | Adding and subtracting with more complicated common denominators. | | | |
| 4 | Adding and subtracting mixed numbers. | | | |
| Challenge | Adding algebraic fractions. | | | |
| EBI | | | | |

Answers

1. a) $\frac{3}{5}$
b) $\frac{1}{2}$
c) $\frac{2}{5}$
d) $\frac{2}{3}$
e) $\frac{7}{7} = 1$

2. a) $\frac{1}{2}$
b) $\frac{7}{8}$
c) $\frac{1}{9}$
d) $\frac{1}{3}$
e) $\frac{4}{5}$

3. a) $\frac{11}{15}$
b) $\frac{7}{12}$
c) $\frac{26}{21} = 1\frac{5}{21}$
d) $\frac{7}{30}$
e) $\frac{25}{36}$

4. a) $4\frac{13}{20}$
b) $6\frac{13}{21}$
c) $4\frac{13}{28}$
d) $1\frac{11}{72}$
e) $8\frac{16}{35}$

Challenge

$$\frac{8x^2 + 35}{28x}$$