Worksheet

Like and unlike fractions

1. Add the following fractions. Leave the answers in the simplest form.

(a)
$$\frac{2}{4} + \frac{1}{4} = \frac{3}{4}$$

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

(c)
$$\frac{3}{7} + \frac{1}{7} = \frac{4}{7}$$

(d)
$$\frac{2}{8} + \frac{4}{8} = \frac{6}{8}$$

2. Subtract the following fractions. Leave the answers in the simplest form.

(a)
$$\frac{4}{5} - \frac{2}{5} = \frac{2}{5}$$

(b)
$$\frac{6}{7} - \frac{3}{7} = \boxed{\frac{3}{7}}$$

(c)
$$\frac{3}{5} - \frac{1}{5} = \boxed{\frac{2}{5}}$$

(d)
$$\frac{7}{8} - \frac{3}{.8} = \frac{4}{8}$$

3. Add these fractions. Leave the answers in the simplest form.

$$\begin{cases} (a) \frac{2}{3} \text{ and } \frac{1}{3} \\ \frac{2}{3} + \frac{1}{3} = \frac{2+1}{3} \\ = \frac{3}{3} = 1 \end{cases}$$

(b)
$$\frac{4}{6}$$
 and $\frac{1}{6}$

$$\frac{4}{6} + \frac{1}{6} = \frac{4}{6}$$

$$= \frac{5}{6}$$

4. Subtract these fractions. Leave the answers in the simplest form.

(a)
$$\frac{3}{7}$$
 from $\frac{7}{7}$

$$\frac{7}{7} - \frac{3}{7} = \frac{7 - 3}{7}$$

$$= \frac{4}{7}$$

(b)
$$\frac{1}{5}$$
 from $\frac{4}{5}$

$$\frac{4}{5} - \frac{1}{5} = \frac{h-1}{5} = \frac{3}{5}$$

Add the following fractions. Leave the answers in the simplest form.

Add the 1
$$\frac{1}{3} + \frac{2}{6}$$
 $(3) \frac{1}{3} + \frac{2}{6}$

(b)
$$\frac{2}{4} + \frac{3}{8}$$

$$\frac{2}{4} + \frac{3}{8} - \frac{2}{4} \times \frac{2}{8} + \frac{3}{8}$$

$$= \frac{24}{8} + \frac{3}{8} \times \frac{2}{8} + \frac{3}{8} \times \frac{2}{8} + \frac{3}{8} \times \frac{2}{8} \times \frac{2}{8} + \frac{3}{8} \times \frac{2}{8} \times \frac$$

(a)
$$\frac{1}{3} + \frac{2}{6}$$

(b) $\frac{2}{4} + \frac{3}{8}$
(c) $\frac{3}{5} + \frac{1}{15}$
 $\frac{3}{5} \times \frac{3}{15} + \frac{3}{5} \times \frac{3}{3} + \frac{1}{15}$
 $\frac{2}{4} + \frac{3}{8} + \frac{2}{15} + \frac{3}{15} = \frac{3 \times 3}{5 \times 3} + \frac{1}{15}$
 $\frac{2}{3} \times \frac{1}{3} + \frac{3}{15} = \frac{3 \times 3}{5 \times 3} + \frac{1}{15} = \frac{3 \times 3}{15} = \frac{3 \times 3}{15} + \frac{1}{15} = \frac{3 \times 3}{15} = \frac{3 \times$

Subtract the following fractions. Leave the answers in the simplest form.

(b)
$$\frac{1}{3} - \frac{1}{6}$$

 $\frac{1}{3} - \frac{1}{6} = \frac{1 \times 2}{3 \times 2} - \frac{1}{6}$
 $= \frac{2}{6} - \frac{1}{6}$
 $= \frac{1}{6}$

Add the following fractions. Leave the answers in the simplest form.

(a)
$$\frac{2}{3}$$
 and $\frac{2}{9}$

$$\frac{2}{3} + \frac{2}{9} = \frac{2}{3} \times \frac{3}{3} + \frac{2}{9}$$

$$= \frac{6}{9} + \frac{2}{9} = \frac{6+2}{9} = \frac{8}{9}$$

(b)
$$\frac{1}{4}$$
 and $\frac{3}{12}$

$$\frac{1}{4} + \frac{3}{12} = \frac{1 \times 3}{4 \times 3} + \frac{3}{12}$$

$$= \frac{3}{12} + \frac{3}{12} = \frac{3 + 3}{12} = \frac{6}{12} = \frac{3}{2} = \frac{1}{2}$$

Subtract the following fractions. Leave the answers in the simplest form.

$$\begin{cases} (a) & \frac{1}{6} \text{ from } \frac{2}{3} \\ \frac{2}{3} - \frac{1}{6} = \frac{2 \times 2}{3 \times 2} - \frac{1}{6} = \frac{4}{6} - \frac{1}{6} \\ = \frac{4 - 1}{6} = \frac{3}{6} = \frac{1}{2} \end{cases}$$

(b)
$$\frac{2}{12}$$
 from $\frac{3}{4}$
 $\frac{3}{4} - \frac{2}{12} = \frac{3 \times 3}{4 \times 3} - \frac{2}{12}$
 $= \frac{9}{12} - \frac{2}{12}$
 $= \frac{7}{12}$