# Fraction Operations

## Homework

**Complete the function machines. Write your answers in simplest form. Do not leave any improper fractions.**

**1.** Rule: Add $\frac{1}{2}$

| Input | Output |
|---|---|
| $\frac{3}{2}$ | $\frac{3}{2} + \frac{1}{2} =$ |
| $\frac{2}{3}$ | |
| $\frac{7}{10}$ | |
| $\frac{1}{4}$ | |
| $3\frac{1}{3}$ | |

**2.** Rule: Subtract $\frac{1}{2}$

| Input | Output |
|---|---|
| $\frac{7}{2}$ | $\frac{7}{2} - \frac{1}{2} =$ |
| $\frac{4}{5}$ | |
| $\frac{9}{10}$ | |
| $\frac{6}{7}$ | |
| $2$ | |

**3.** Rule: Multiply by $\frac{1}{2}$

| Input | Output |
|---|---|
| $\frac{2}{3}$ | $\frac{2}{3} \times \frac{1}{2} =$ |
| $\frac{1}{4}$ | |
| $5$ | |
| $1\frac{1}{2}$ | |
| $\frac{3}{8}$ | |

**4.** Rule: Divide by $\frac{1}{2}$

| Input | Output |
|---|---|
| $12$ | $12 \div \frac{1}{2} =$ |
| $6$ | |
| $3$ | |
| $2$ | |
| $1$ | |

**5.** What is the difference between "divide 12 *in* half" and "divide 12 *by* a half"? Should the answer be larger or smaller than the original amount?