Fractions Toolbox

$$\frac{5}{6} \longrightarrow 6\frac{2}{3}\} \longrightarrow \frac{13}{8}$$

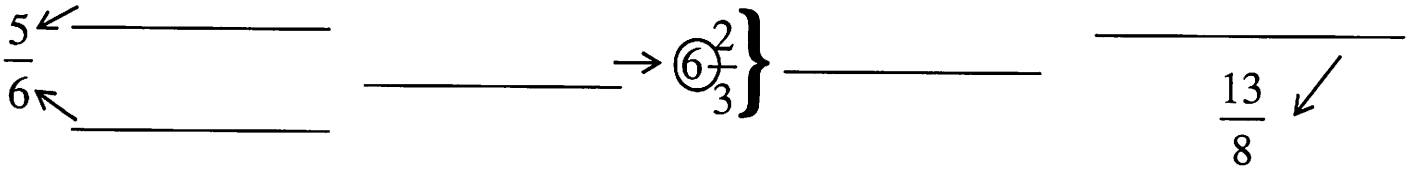**Simplify the Fraction into Lowest Terms**

$$\frac{18}{24}$$

1. Find GCF of numerator and denominator.

2. Divide both the numerator and denominator by the GCF.

Change the Mixed Number into an Improper Fraction

$$6\frac{2}{5}$$

1. • the denominator and the whole number.

2. + the result to the numerator.

Change the Improper Fraction into a Mixed Number

$$\frac{20}{6}$$

1. The number of times the denominator divides into the numerator is the whole number.

2. The remainder is the numerator over the original denominator.

3. Reduce fraction if necessary.

Find the Product.

$$\frac{3}{16} \cdot 5$$

1. $\# = \frac{\#}{1}$

2. Multiply across the top then multiply across the bottom.

3. Write answer in lowest terms.

Find the Product.

$$\frac{3}{7} \cdot \frac{1}{2}$$

1. Multiply across the top then multiply across the bottom.

2. Write answer in lowest terms.

Find the Product. Express answer in lowest terms.

$$\frac{2}{3} \cdot \frac{3}{5}$$

| 1. Multiply across the top then multiply across the bottom. |
| 2. Write answer in lowest terms. |

Find the Product. Express answer as a mixed number in lowest terms.

$$3\frac{1}{2} \cdot \frac{3}{4}$$

| 1. Change mixed number to improper fraction. |
| 2. Multiply across the top then multiply across the bottom. |
| 3. Write answer as a mixed number. |
| 4. Reduce fraction if necessary. |

Find the Product. Express answer as a mixed number in lowest terms.

$$2\frac{3}{8} \cdot 6\frac{1}{3}$$

| 1. Change mixed number to improper fraction. |
| 2. Multiply across the top then multiply across the bottom. |
| 3. Write answer as a mixed number. |
| 4. Reduce fraction if necessary. |

Find the Quotient. Express answer as a mixed number in lowest terms.

$$\frac{5}{6} \div \frac{2}{3}$$

| 1. **Flip SECOND fraction and change division to MULTIPLICATION** |
| 2. Multiply across the top then multiply across the bottom. |
| 3. Write answer in lowest terms. |

Find the Quotient. Express answer as a mixed number in lowest terms.

$$2\frac{3}{4} \div 1\frac{1}{8}$$

| 1. Change mixed number to improper fraction. |
| 2. **Flip SECOND fraction and change division to MULTIPLICATION** |
| 3. Multiply across the top then multiply across the bottom. |
| 4. Write answer as a mixed number. |
| 5. Reduce fraction if necessary. |

Fractions Toolbox

$\dfrac{5}{6}$ ← numerator
← denominator

$\dfrac{\text{Whole}}{\text{Number}}$ → $6\frac{2}{3}$ } Mixed Number

Improper Fraction
$\dfrac{13}{8}$ ↙

Simplify the Proper Fraction into Lowest Terms

Equivalent Fractions

$\dfrac{18 \div 6}{24 \div 6} = \dfrac{3}{4}$

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3 | 18  24  →  18/24
2 | 6   8   →  6/8
    3   4   →  3/4
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| 1. Find GCF of numerator and denominator. |
| 2. Divide both the numerator and denominator by the GCF. |

Change the Mixed Number into an Improper Fraction

$6\frac{+2}{\times 5} = \dfrac{32}{5}$

| 1. • the denominator and the whole number. |
| 2. + the result to the numerator. |

Change the Improper Fraction into a Mixed Number

$\dfrac{20}{6} = 3\frac{2}{6} \begin{array}{c} \div 2 \\ \div 2 \end{array} = 3\frac{1}{3}$

| 1. The number of times the denominator divides into the numerator is the whole number. |
| 2. The remainder is the numerator over the original denominator. |
| 3. Reduce fraction if necessary. |

Find the Product.

$\dfrac{3}{16} \cdot 5 \qquad \dfrac{3}{16} \cdot \dfrac{5}{1} = \dfrac{15}{16}$

| 1. $\# = \dfrac{\#}{1}$ |
| 2. Multiply across the top then multiply across the bottom. |
| 3. Write answer in lowest terms. |

Find the Product.

$\dfrac{3}{7} \cdot \dfrac{1}{2} = \dfrac{3}{14}$

| 1. Multiply across the top then multiply across the bottom. |
| 2. Write answer in lowest terms. |

Find the Product. Express answer in lowest terms.

$$\frac{2}{3} \cdot \frac{3}{5} \qquad \frac{6 \div 3}{15 \div 3} \qquad \frac{2}{5}$$

> 1. Multiply across the top then multiply across the bottom.
>
> 2. Write answer in lowest terms.

Find the Product. Express answer as a mixed number in lowest terms.

$$3\frac{+1}{\times 2} \cdot \frac{3}{4}$$

$$\frac{7}{2} \cdot \frac{3}{4} = \frac{21}{8} = \boxed{2\frac{5}{8}}$$

> 1. Change mixed number to improper fraction.
>
> 2. Multiply across the top then multiply across the bottom.
>
> 3. Write answer as a mixed number.
>
> 4. Reduce fraction if necessary.

Find the Product. Express answer as a mixed number in lowest terms.

$$15 - 1 \ \llcorner 24$$

$$2\frac{+3}{\times 8} \cdot 6\frac{+1}{\times 3}$$

$$\frac{19}{8} \cdot \frac{19}{3} = \frac{361}{24} = \boxed{15\frac{1}{24}}$$

> 1. Change mixed number to improper fraction.
>
> 2. Multiply across the top then multiply across the bottom.
>
> 3. Write answer as a mixed number.
>
> 4. Reduce fraction if necessary.

Find the Quotient. Express answer as a mixed number in lowest terms.

$$\frac{5}{6} \div \frac{2}{3}$$

$$\frac{5}{6} \cdot \frac{3}{2} = \frac{15}{12} = 1\frac{3 \div 3}{12 \div 3} = \boxed{1\frac{1}{4}}$$

> 1. **Flip SECOND fraction and change division to MULTIPLICATION**
>
> 2. Multiply across the top then multiply across the bottom.
>
> 3. Write answer in lowest terms.

Find the Quotient. Express answer as a mixed number in lowest terms.

$$2\frac{3}{4} \div 1\frac{1}{8}$$

$$\frac{11}{4} \div \frac{9}{8}$$

$$\text{K} \quad \text{c} \quad \text{F}$$

$$\frac{11}{4}_1 \cdot \frac{8^2}{9} = \frac{22}{9} = \boxed{2\frac{4}{9}}$$

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