

Simplifying Complex Fractions Involving Mixed Numbers

Evaluate each expression.

1) $\left(\frac{3\frac{1}{4}}{2\frac{1}{2}}\right)^2$

2) $1\frac{5}{6} \cdot \frac{1\frac{3}{5}}{3\frac{2}{3}}$

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

4) $\frac{3\frac{1}{2}}{3\frac{5}{6}} + 1\frac{2}{3}$

5) $\frac{2\frac{1}{2}}{5\frac{1}{4} - 1\frac{1}{3}}$

6) $1\frac{1}{5} + \frac{2\frac{2}{5}}{3\frac{1}{6}}$

7) $\frac{\left(3\frac{5}{6}\right)^2}{2\frac{1}{2}} - 1\frac{3}{4}$

8) $3\frac{4}{5} - \left(3\frac{5}{6} - \frac{3\frac{1}{3}}{2\frac{2}{3}}\right)$

9) $1\frac{1}{3} \cdot \frac{2\frac{1}{4}}{3\frac{5}{6} + 2\frac{2}{3}}$

10) $\frac{2\frac{1}{6}}{3\frac{1}{2}} + 1\frac{1}{3} + 3\frac{1}{2}$

$$11) \frac{2\frac{3}{4} \cdot 3\frac{3}{5}}{2\frac{3}{4}} + 2\frac{1}{2}$$

$$12) \frac{1\frac{1}{4}}{\left(2\frac{2}{5}\right)^2} \cdot 2\frac{1}{3}$$

$$13) 3\frac{4}{5} - 2\frac{4}{5} + \frac{2\frac{3}{4}}{2\frac{1}{2}}$$

$$14) \frac{5}{3\frac{2}{5}} \cdot \left(2\frac{3}{5}\right)^2$$

$$15) \frac{1\frac{1}{2} + 3\frac{1}{3} - 3\frac{1}{4}}{2\frac{1}{4}}$$

$$16) \left(1\frac{1}{2} + 2\frac{1}{6}\right) \cdot \frac{3\frac{1}{2}}{2\frac{1}{5}}$$

$$17) 3\frac{1}{5} - \left(3\frac{1}{5} - \frac{3\frac{1}{2}}{1\frac{5}{6}}\right)$$

$$18) \frac{1\frac{1}{2} \cdot 3\frac{1}{3}}{2\frac{1}{2} - 1\frac{2}{3}}$$

$$19) \frac{\left(3\frac{1}{6}\right)^2}{6 + 3\frac{1}{6}}$$

$$20) 2\frac{1}{3} \cdot \frac{3\frac{1}{2} - 2\frac{1}{2}}{1\frac{1}{4}}$$

Answers to Simplifying Complex Fractions Involving Mixed Numbers

1) $1\frac{69}{100}$

2) $\frac{4}{5}$

3) $\frac{13}{20}$

4) $2\frac{40}{69}$

5) $\frac{30}{47}$

6) $1\frac{91}{95}$

7) $4\frac{23}{180}$

8) $1\frac{13}{60}$

9) $\frac{6}{13}$

10) $5\frac{19}{42}$

11) $6\frac{1}{10}$

12) $\frac{875}{1728}$

13) $2\frac{1}{10}$

14) $9\frac{16}{17}$

15) $\frac{19}{27}$

16) $5\frac{5}{6}$

17) $1\frac{10}{11}$

18) 6

19) $1\frac{31}{330}$

20) $1\frac{13}{15}$