Pre-Algebra Skill

Simplifying Complex Fractions Involving Signed Fractions

Evaluate each expression.

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

2) $\dfrac{3\frac{1}{3}}{(-2)-3\frac{2}{3}}$

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

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

5) $\left(\dfrac{\frac{5}{3}}{2\frac{1}{2}}\right)^{2}$

6) $\dfrac{\left(-\frac{1}{3}\right)-1}{\frac{1}{6}}$

7) $-\dfrac{\frac{2}{5}\cdot\left(-2\frac{1}{3}\right)}{2\frac{1}{2}}$

8) $\left(-\frac{1}{3}\right)+\dfrac{1\frac{1}{6}}{\frac{2}{3}}$

9) $\left(-3\frac{1}{2}\right)+\dfrac{2\frac{1}{2}}{-1\frac{1}{6}}$

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

Answers to Simplifying Complex Fractions Involving Signed Fractions

1) $\frac{15}{76}$

2) $-\frac{10}{17}$

3) $\frac{65}{66}$

4) $-\frac{39}{110}$

5) $\frac{4}{9}$

6) -8

7) $\frac{28}{75}$

8) $\frac{17}{12}$

9) $-\frac{79}{14}$

10) $-\frac{43}{30}$