

7th Grade Pre-Algebra: Fractions Review

1. $\frac{7}{15} + \frac{1 \cdot 5}{3 \cdot 5} = \frac{7}{15} + \frac{5}{15}$
 LCD: 15
 $= \frac{12}{15} \stackrel{\div 3}{=} \frac{4}{5}$

7. $\frac{16}{3} \cdot \frac{18}{5} = \frac{96}{5} \text{ or } 19\frac{1}{5}$

2. $7\frac{1}{4} + 11\frac{5}{6}$
 LCD: 12
 $\frac{29 \cdot 3}{4 \cdot 3} + \frac{71 \cdot 2}{6 \cdot 2} = \frac{87}{12} + \frac{142}{12}$
 $= \frac{229}{12} \text{ or } 19\frac{1}{12}$

8. $-4\frac{1}{8} \cdot 5\frac{1}{3}$
 $-\frac{33}{8} \cdot \frac{16}{3} = -\frac{22}{1} = -22$

3. $\frac{-9}{1} - \left(-5\frac{1}{4}\right)$
 LCD: 4
 $\frac{-9 \cdot 4}{1 \cdot 4} - \frac{-21}{4} = \frac{-36}{4} + \frac{21}{4} = \frac{-15}{4}$
 or $-3\frac{3}{4}$

9. $-2\frac{1}{2} \cdot \left(-\frac{2}{3}\right)$
 $-\frac{5}{2} \cdot \frac{-2}{3} = \frac{5}{3} \text{ or } 1\frac{2}{3}$

4. $\frac{7}{9} + \frac{1}{9} = \frac{8}{9}$

10. $\frac{7}{10} \div \left(-2\frac{2}{5}\right)$
 $\frac{7}{10} \div \frac{-12}{5} = \frac{7}{10} \cdot \frac{5}{-12} = \frac{7}{-24}$

5. $-\frac{3 \cdot 2}{5 \cdot 2} - \frac{3}{10}$
 LCD: 10
 $-\frac{6}{10} - \frac{3}{10} = \frac{-6}{10} + \frac{-3}{10} = \frac{-9}{10}$

11. $\frac{7}{12} \div \frac{2}{3}$
 $\frac{7}{12} \cdot \frac{3}{2} = \frac{7}{8}$

6. $-\frac{7}{9} + \frac{5}{9} = \frac{-2}{9}$

12. $2\frac{1}{4} \div \left(-1\frac{1}{4}\right)$
 $\frac{9}{4} \div \frac{-5}{4} = \frac{9}{4} \cdot \frac{4}{-5} = \frac{9}{-5} \text{ or } -1\frac{4}{5}$