

Section 8.2 Warm Up

For #1 to #4, match each expression with the correct first step.

1. $\left(-\frac{2}{9}\right) + \left(-\frac{5}{6}\right)$ _____

2. $\frac{-3}{8} \div \frac{6}{9}$ _____

3. $\frac{-2}{3} \times \frac{6}{-7}$ _____

4. $\frac{7}{8} - \frac{1}{8}$ _____

A Add the numerators.

B Subtract the numerators.

C Use equivalent fractions to change to the same denominator.

D Change each fraction to a mixed number.

E Multiply the numerators and multiply the denominators.

F Change to multiplying by the reciprocal.

5. Write each fraction in lowest terms.

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

b) $\frac{-4}{-8}$

c) $\frac{-10}{18}$

d) $\frac{6}{36}$

e) $\frac{-18}{-6}$

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



6. Simplify using the order of operations.

$$\begin{aligned}
 \mathbf{a)} \quad & \frac{9}{8} + \left(-\frac{1}{4}\right) \times 3 \\
 & = \frac{9}{8} + \left(-\frac{1}{4}\right) \times \frac{3}{\boxed{}} \\
 & = \frac{9}{8} + \left(-\frac{\boxed{}}{\boxed{}} \right) \\
 & = \frac{9}{8} + \left(-\frac{\boxed{}}{8} \right) \\
 & = \frac{\boxed{}}{\boxed{}} \\
 & = \frac{\boxed{}}{\boxed{}}
 \end{aligned}$$

$$\begin{aligned}
 \mathbf{b)} \quad & \frac{1}{2} + \frac{1}{3} \div \left(-\frac{1}{4}\right) \\
 & = \frac{1}{2} + \frac{1}{3} \times \left(-\frac{\boxed{}}{\boxed{}} \right) \\
 & = \frac{1}{2} + \left(-\frac{\boxed{}}{\boxed{}} \right) \\
 & = \frac{\boxed{}}{\boxed{}} \\
 & = \frac{\boxed{}}{\boxed{}}
 \end{aligned}$$

$$\mathbf{c)} \quad 4\frac{1}{2} \times \left(-\frac{2}{3}\right) + \frac{7}{8}$$

$$\mathbf{d)} \quad \frac{4}{9} + \left(\frac{-3}{4}\right) \times \left(-\frac{2}{9}\right) \div \frac{3}{5}$$

