

AA PREP—INTRODUCTION TO RATIONALS—WORKSHEET #2

1. Simplify each rational expression.

a) $\frac{5x}{5x}$	b) $\frac{2 \cdot 3 \cdot 4 \cdot 5}{3 \cdot 4 \cdot 5 \cdot 6}$
c) $\frac{9-x}{x-9}$	d) $\frac{x+7}{7+x}$
e) $\frac{6x^3+18x^2}{12x}$	f) $\frac{-x^2+x+56}{x^2-64}$

2. Perform each operation (multiplication or division). Simplify.

a) $\frac{40}{48} \cdot \frac{84}{90}$	b) $\frac{36}{52} \div \frac{18}{39}$
c) $\frac{x+10}{2-x} \cdot \frac{x-2}{10+x}$	d) $\frac{6x^2+5x-4}{9x^2-16} \div \frac{4x^2-1}{9x^2-24x+16}$

3. Perform each operation (addition or subtraction). Simplify.

a) $\frac{4}{13} + \frac{10}{13}$	b) $\frac{5}{12} - \frac{7}{16}$
c) $\frac{4x}{x-10} + \frac{x}{x-10}$	d) $\frac{3x}{x^2-2x-8} - \frac{x}{x+2}$