

Section 6.6 Focus Exercises

1. Simplify each simpler complex fraction using any method.

a) $\frac{\frac{5}{3}}{\frac{7}{4}}$

b) $\frac{\frac{10}{9}}{\frac{25}{12}}$

c) $\frac{\frac{4}{11}}{\frac{8}{8}}$

d) $\frac{12}{\frac{6}{5}}$

e) $\frac{\frac{c^2}{p}}{\frac{5c}{p^3}}$

f) $\frac{12x^3}{\frac{16x^2}{5y^4}}$

g) $\frac{\frac{3a^3}{b^2}}{6a^4}$

h) $\frac{\frac{21x^2y}{10w}}{\frac{14xy^2}{15w^2}}$

2. Simplify each higher level complex fraction using any method.

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

b)
$$\frac{\frac{5}{12} + \frac{1}{3}}{\frac{2}{3} - \frac{1}{4}}$$

c)
$$\frac{1 + \frac{2}{x}}{\frac{x}{3} + \frac{2}{3}}$$

d)
$$\frac{\frac{1}{6} - \frac{1}{2x}}{\frac{1}{3x} - \frac{1}{x^2}}$$

e)
$$\frac{1 - \frac{4}{x}}{1 - \frac{2}{x} - \frac{8}{x^2}}$$

f)
$$\frac{\frac{1}{3} + \frac{5}{3x} + \frac{2}{x^2}}{\frac{1}{3} - \frac{3}{x^2}}$$