Unit 11.4 Complex Fractions

1. Simplify the complex fraction

    a. $\dfrac{\frac{2x}{3y^2}}{\frac{5x^2}{6y}}$

    b. $\dfrac{\frac{x+3}{2x}}{\frac{2x-1}{4x^2}}$

    c. $\dfrac{\frac{2x-1}{x}}{\frac{2}{x}+3}$

d. $\dfrac{\dfrac{1}{3} + \dfrac{1}{x}}{\dfrac{1}{2} - \dfrac{1}{x}}$

e. $\dfrac{\dfrac{4}{x} - 1}{1 - \dfrac{1}{x-3}}$

f. $\dfrac{\dfrac{1}{x+h} - \dfrac{1}{x}}{h}$

g. $\dfrac{\dfrac{x+1}{x-1} - \dfrac{x-1}{x+1}}{\dfrac{x+1}{x-1} + \dfrac{x-1}{x+1}}$

h. $\dfrac{\dfrac{x}{x-4} - \dfrac{1}{x-1}}{\dfrac{x}{x-1} + \dfrac{2}{x-3}}$

i. $\dfrac{1}{x+1} - \dfrac{3}{2x} \cdot \dfrac{4x}{x+1}$

j. $\dfrac{x}{x-1} - \dfrac{3}{x-1} \cdot \dfrac{x+2}{x}$

k. $\dfrac{\dfrac{1}{y+t} - \dfrac{1}{t}}{y}$

l. $\dfrac{\dfrac{3y^2}{y+5}}{\dfrac{12y^4}{y^2+10y+25}}$