

Supplementary Worksheet 3

The following 3 problems are from your e-textbook. You can find more problems like these at the end of Section 1.4, pages 43-44, #s 73-84.

Simplify the following fractional expressions, i.e., remove any fractions or negative exponents that appear in the numerator or denominator, and cancel factors as much as possible.

$$\textcircled{1} \frac{\frac{1}{1+x+h} - \frac{1}{1+x}}{h}$$

$$\textcircled{2} \frac{(1-x^2)^{1/2} + x^2(1-x^2)^{-1/2}}{1-x^2}$$

$$\textcircled{3} \frac{(7-3x)^{1/2} + \frac{3}{2}x(7-3x)^{-1/2}}{7-3x}$$