



Grade 10

Mathematics

Unit : 13– Algebraic Fractions

(1) Simplify

i) $\frac{y}{2} + \frac{2y}{2}$

ii) $\frac{x}{5} + \frac{2x}{7}$

iii) $\frac{x}{3} + \frac{2x}{9} + \frac{5x}{12}$

iv) $\frac{a-3}{2} + \frac{a+4}{6}$

v) $\frac{y-3}{4} - \frac{y-2}{6}$

vi) $\frac{12}{x-3} + \frac{7}{x-3}$

vii) $\frac{9}{x-2} - \frac{4}{x-2}$

viii) $\frac{12}{y} + \frac{7}{y-3}$

ix) $\frac{18}{x} - \frac{6}{(x+2)}$

(2) Simplify

i) $\frac{4}{2a} + \frac{2}{3a}$

ii) $\frac{5}{a} + \frac{4}{b}$

iii) $\frac{3}{2a^2} + \frac{2}{6a}$

iv) $\frac{7}{2y} + \frac{2}{3y} - \frac{1}{4x}$

v) $\frac{5}{m^2} - \frac{2}{4m}$

(3) Simplify

i) $\frac{1}{x+2} + \frac{1}{x-3}$

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

iii) $3 - \frac{2}{y+4}$

iv) $\frac{2}{x-3} - \frac{2}{2x-1}$

(4) Simplify

i) $\frac{1}{x^2-y} + \frac{1}{x^2-y^2}$

ii) $\frac{5}{x^2+5x+6} - \frac{2}{(x+3)}$

iii) $\frac{1}{x+2} + \frac{4}{x^2-x-6}$

iv) $\frac{2}{a^2-1} + \frac{1}{(a+1)^2} + \frac{2}{a+1}$

v) $\frac{5}{x^2-9} + \frac{2}{x^2-7x+12}$