

Classwork 6
Precalculus MTH 130
Instructor: Abhijit Champanerkar

Name: _____

1. Find the domain of the following rational expressions.

a. $\frac{2x + 1}{5 - 4x}$

b. $\frac{y^2 + 1}{y^3 - 3y^2 - 10y}$

2. Perform addition/subtraction and simplify.

a. $2 - \frac{x}{x + 3}$

b. $\frac{1}{x + 5} - \frac{x}{x + 3}$

c. $u + 1 + \frac{u}{u + 1}$

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

e. $\frac{3}{t - 3} + \frac{5}{t^2 - 9}$

3. Simplify the compound fractional expressions.

a. $\frac{x + \frac{1}{x+2}}{x+3}$

b. $\frac{\frac{x}{y} - \frac{y}{x}}{x+y}$

c. $\frac{1 + \frac{1}{c-1}}{1 - \frac{1}{c-1}}$

d. $1 + \frac{1}{1 + \frac{1}{1+x}}$