

DIRECTIONS: Simplify

1.  $\frac{x+3}{5} - \frac{2x+1}{10}$

2.  $\frac{2x+5}{4x^2} + \frac{2x-5}{10x}$

3.  $\frac{1}{xy^3} - \frac{1}{x^3y}$

4.  $\frac{1}{yz} + \frac{1}{zx} + \frac{1}{xy}$

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

6.  $\frac{1}{u^2-2u} - \frac{1}{u^2-4}$

7.  $\frac{1}{p^2-2p+1} - \frac{1}{p^2+p-2}$

8.  $(x-y)^{-2} - (x+y)^{-2}$

9.  $\frac{3}{4x^2-12xy+9y^2} + \frac{1}{2xy-3y^2}$

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

11.  $\frac{u^{-2}-v^{-2}}{u^{-1}-v^{-1}}$

12.  $\frac{h+h^{-2}}{1+h^{-1}}$

13.  $\frac{\frac{2}{y+2}-1}{\frac{1}{y+2}+1}$

14.  $\frac{\frac{1}{a+1}+\frac{1}{a-1}}{\frac{1}{a+1}-\frac{1}{a-1}}$

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