

Name - \_\_\_\_\_

Start time - \_\_\_ : \_\_\_

End time - \_\_\_ : \_\_\_

**Simplify the expressions.**

a)  $\left(4 - \frac{x^2}{y^2}\right) : \frac{2y-x}{y^2} =$  \_\_\_\_\_

b)  $\frac{4}{r+2} + \frac{3}{r-2} - \frac{7r}{r^2-4} =$  \_\_\_\_\_

c)  $\left(\frac{a}{4} - 1 + \frac{1}{a}\right) : \left(\frac{a}{2} - \frac{2}{a}\right) =$  \_\_\_\_\_

d)  $\frac{5}{t-3} - \frac{t-2}{t^2-9} + \frac{t-1}{2t+6} =$  \_\_\_\_\_

e)  $\left(\frac{3}{x} - \frac{2}{x+1}\right) \left(\frac{3}{x} - \frac{2}{x-1}\right) =$  \_\_\_\_\_

f)  $\left(\frac{1}{a+1} - \frac{2a}{a^2-1}\right) \left(\frac{1}{a} - 1\right) =$  \_\_\_\_\_

g)  $\left(\frac{2x+1}{2x-1} - \frac{2x-1}{2x+1}\right) : \frac{4x}{10x-5} =$  \_\_\_\_\_

h)  $\frac{(a-1)a}{a^2-25} + \frac{a-2}{5-a} - \frac{a-3}{a+5} =$  \_\_\_\_\_

i)  $\left(\frac{x^2}{4y^2-x^2} + 1\right) \left(1 - \frac{x}{x-2y}\right) =$  \_\_\_\_\_

j)  $\frac{r+1}{r^2-2r} + \frac{r+1}{r^2+2r} - \frac{2r}{r^2-4} =$  \_\_\_\_\_

k)  $\left(x - \frac{3x}{x+1}\right) \left(\frac{x-1}{x-2} - \frac{x}{x-1}\right) =$  \_\_\_\_\_

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