

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

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

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

**Simplify the expressions.**

a)  $\frac{a^2 - b^2}{6a^2b^2} \div \frac{a+b}{3ab} =$  \_\_\_\_\_

b)  $\frac{(a-b)^2}{(a+b)^2} \times \frac{a+b}{a-b} =$  \_\_\_\_\_

c)  $\frac{x+y}{x-y} \times \frac{2x^2-2y^2}{x^2+xy} =$  \_\_\_\_\_

d)  $\frac{x^2-y^2}{x^2} \frac{x^4}{(x+y)^2} =$  \_\_\_\_\_

e)  $\frac{a^2-25}{a^2-3a} \div \frac{a^2+5a}{a^2-9} =$  \_\_\_\_\_

f)  $\frac{1}{x^2-x} \div \frac{1}{x^2-x^3} =$  \_\_\_\_\_

g)  $\frac{b^2-25}{b^2-3b} \times \frac{b^2-9}{b^2+5b} =$  \_\_\_\_\_

h)  $\frac{2x^2-2y^2}{xy} \div \frac{x+y}{4x^2y^2} =$  \_\_\_\_\_

i)  $\frac{x^2-2xy}{y} \div (x^2-4y^2) =$  \_\_\_\_\_

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

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

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