

Name:



Simplify the following

a)  $\frac{x+5}{x^2+5x}$

$$\frac{1}{x}$$

g)  $\frac{x-2}{x^2-6x+8}$

$$\frac{1}{x-4}$$

b)  $\frac{x+1}{3x^2+3x}$

$$\frac{1}{3x}$$

h)  $\frac{7x-7}{x^2-1}$

$$\frac{7}{x+1}$$

c)  $\frac{4x+8}{3x^2+6x}$

$$\frac{4}{3x}$$

i)  $\frac{x^2+5x+6}{x^2+7x+10}$

$$\frac{x+3}{x+5}$$

d)  $\frac{x+3}{x^2+5x+6}$

$$\frac{1}{x+2}$$

j)  $\frac{x^2+9x+14}{x^2-4}$

$$\frac{x+7}{x-2}$$

e)  $\frac{x+3}{x^2+2x-3}$

$$\frac{1}{x-1}$$

k)  $\frac{x^2-12x+35}{x^2-13x+42}$

$$\frac{x-5}{x-6}$$

f)  $\frac{2x+6}{x^2+10x+21}$

$$\frac{2}{x+7}$$

l)  $\frac{2x+10}{3x^2+13x-10}$

$$\frac{2}{3x-2}$$

**Exam question:**

a) Factorise  $x^2 - 6x + 8$

$$(x - 4)(x - 2)$$

b) Hence simplify  $\frac{2x-8}{x^2-6x+8}$

$$\frac{2}{x-2}$$

