

Show all working – <u>NO</u> calculator required.

1. Simplify 
$$\frac{x^2+5x}{x^2+x-20}$$
 (3)  
2. Express,  $\frac{7}{x+4} = \frac{3}{x}$   $x \neq 0, x \neq -5$ , as a single fraction in its simplest form. (2)  
3. Express,  $\frac{5a}{4b} \div \frac{1}{2b^2}$   $b \neq 0$ , in its simplest form. (3)  
4. Express,  $\frac{5}{x-3} + \frac{3}{x+2}$   $x \neq 3, x \neq -2$ , as a single fraction in its simplest form. (3)  
5. Simplify  $\frac{x^2-25}{2x^2+8x-10}$  (3)  
6. Express,  $\frac{p}{p^2-4} \div \frac{3}{p-2}$   $p \neq 2, p \neq -2$  in its simplest form. (3)  
7. Express,  $\frac{4}{x-1} = \frac{3}{x+3}$   $x \neq 1, x \neq -3$ , as a single fraction in its simplest form. (3)

**Total Marks: 20** 

Marks