

**RELATIONSHIPS HOMEWORK 2**

Non calculator:

The function  $f(x)$  is defined by  $f(x) = \frac{2}{\sqrt{x}}$ ,  $x > 0$ .

Express  $f(5)$  as a fraction with a rational denominator. 2

Calculator:

Factorise fully  $3x^2 - 48$ . 2

Challenge Question (calculator):

Express

$$\frac{3}{x-2} + \frac{5}{x+1}, \quad x \neq 2, x \neq -1$$

as a single fraction in its simplest form. 3