

The polynomial  $2x^4 + ax^3 + bx - 1$ , where  $a$  and  $b$  are constants, is denoted by  $p(x)$ . When  $p(x)$  is divided by  $x^2 - x + 1$  the remainder is  $3x + 2$ .

Find the values of  $a$  and  $b$ .

[5]