

**3 (a) Expand**

$$(1 + px)^{-5} \quad p \neq 0$$

in ascending powers of  $x$ , up to and including the term in  $x^4$   
Give each term in its simplest form.

(3)

The coefficient of  $x^r$  in the expansion is  $c_r$

Given that  $c_4 = 2c_3$

(b) find the value of  $p$ .

(2)

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