

A167 Expanding and factorising 2

① $x^3 + 6x^2 - 24x - 64$

② $x^3 + 6x^2 + 11x + 6$
 $a=1, b=6, c=11, d=6$

③ a) $6x^3 + 5x^2 - 17x - 6$
 b) $n^{7/2}$

④ $6x^3 - 23x^2 - 33x - 10$

⑤ a) x^6
 b) $(2y+1)(y-3)$

⑥ a) $(a+b)(a-b)$
 b) $12(x^2+1)$

⑦ a) $(e+10)(e-10)$
 b) $(2x+3)(x-5)$
 c) $(q-7)^6$

⑧ a) $3(2+3x)$
 b) $(y+4)(y-4)$
 c) $(2p-5)(p+2)$

⑨ a) $x(x+7)$
 b) $(y-8)(y-2)$
 c) i) $(2t+1)(t+2)$
 ii) t positive integer
 $\therefore (2t+1)(t+2)$ is a product of two positive integers ≥ 2
 \therefore not prime

[Faint handwritten notes and calculations on the right side of the page, including various algebraic expressions and circled numbers.]