

ALGEBRA REVISION  
TERM 3

①

Q1. Solve equations

(a) (i)

$$17x + 5 = 4x - 3$$

(ii)  $x^4 = 81$

(b) Solve  $3x^2 - 5x + 2 = 0$

(c) (i) Factorise  $x^2 + x - 20$

(ii) simplify  $\frac{x^2 + 8x + 15}{x^2 + 3x}$

Q2

(a)  $V = 3\pi\sqrt{mk}$

(i) If  $m = 4$  and  $k = 16$ , find  $V$  in terms of  $\pi$

(ii) Rewrite the formula with  $m$  as the subject  
i.e.  $m = \dots$

(b) (i) Expand  $-5x(1-x)$

(ii) solve  $\frac{7x-1}{5} = 4$

Q3

(a) Solve  $2x(x+7) = 0$

(b) simplify  $\frac{7x^8}{21x^5}$

Q4

(a) Expand and factorise

(i) Expand and simplify  $(x+6)(4x-1)$